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East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

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CONTENTS

REPORT ON FULFILLMENT OF 1981 QUARTERLY ECONOMIC PLAN

Sofia RABOTNICHESKO DELO in Bulgarian 25 Apr 81 p 2

[BTA--Press release of Integrated Social Information System Committee on results of the fulfillment of the Integrated Plan for the Socioeconomic Development of the Bulgarian People's Republic in the first quarter of 1981: "Profitable Labor, High Results"]

[Text] Labor collectives of economic organizations and their units launched socialist competition on a broad scale and fulfilled the plan for the first quarter of 1981 in honor of the 12th Congress of the Bulgarian Communist Party and the 25th anniversary of the April Plenum.

The plan for the social productivity of labor was fulfilled 112.0 percent, that for net production 110.2 percent, and that for aggregate profit 121.7 percent. The average monthly wage of manual and office workers reached 174 leva. As compared with the corresponding period of 1980, the social productivity of labor increased 14.9 percent, net production 16.4 percent, and aggregate profit 20.6 percent.

The plan for the treatment of scientific and technical problems was fulfilled 101.1 percent, and that for the adoption of scientific and technical achievements in practice 112.9 percent. Adopted were 242 new and improved technologies, 212 new and improved products, 54 automated systems designs.

I. Industry

The industrial production plan was fulfilled 103.8 percent, the increase over the first quarter of 1980 amounting to 7.9 percent and the volume thereof reaching 7,548,000,000 leva.

Broken down by individual economic complexes and ministries, fulfillment of the plan for output disposed of and for the growth rate of production and the social productivity of labor is characterized by the following data:

Economic Complexes & Ministries	% Fulfillment of Quarterly Plan for Sale of Commodity Production	1st Quarter 1981 as % of 1st Quarter 1980	
		Commodity production turned out	Social productivity of labor
Ministry of Power Supply	100.4	108.1	112.7
Ministry of Chemical Industry	100.2	113.6	105.2
Ministry of Machine Building	105.9	110.2	118.7
Ministry of Electronics and Electrical Engineering	100.8	109.1	120.2
Ministry of Light Industry	100.5	106.3	126.1
National Agrarian-Industrial Union	103.9	104.6	108.9
Ministry of Construction and Construction Materials	99.7	106.4	97.5
Ministry of Metallurgy and Mineral Resources	100.2	120.7	127.3
Ministry of Transportation	101.1	105.2	110.9
Ministry of Forests and Forest Industry	101.5	106.3	119.3
Ministry of Internal Trade and Public Services	101.5	110.1	111.5

The production of certain basic industrial products was as follows:

Product	Output produced in 1981	1st Quarter 1981 as % of 1st Quarter 1980
Electric power, in 000,000 kwh	10,300.0	105.8
Coal, in 000 tons	7,593.0	99.8
Rolled ferrous metals, in 000 tons	791.6	104.2
Electrotelphers, in 000 items	30.5	101.9
Motor trucks, in 000 items	4.8	87.7
Power transformers, in 000 items	2.1	116.3
Soda ash (base 98%), in 000 tons	361.0	97.6
Nitrogen fertilizers (base 100% including carbamide), in 000 tons	192.3	99.3
Synthetic fibers and rayons, in 000 tons	25.8	114.0
Paper, in 000 tons	86.1	104.0
Paper pulp, in 000 tons	57.3	108.9
Cement, in 000 tons	1,218.8	100.7
Cotton fabrics, in 000,000 m	86.0	101.5

Product (continued)	Output produced in 1981	1st Quarter 1981 as % of 1st Quarter 1980
Woolen fabrics, in 000,000 m	9.2	96.4
Silk fabrics, in 000,000 m	8.8	105.0
Shoes (excluding house slippers), in 000,000 pairs	4.7	104.2
Meat and meat products, in 000 tons	117.5	101.1
Butter, in 000 tons	4.6	90.7

The following quarterly plans were overfulfilled: electric power, motor vehicle tires, softwood boards and pieces, lathes, cranes, battery-powered trucks, household glassware, cotton, woolen and silk fabrics, knit outer- and underwear, canned fruits, kashkaval cheese, beer, tobacco products and many other industrial products.

Contracts for delivery of goods for the internal market were fulfilled 104.9 percent. Greater quantities of the following were provided: sterilized canned vegetables, pasteurized fruit juices, mature onions, potatoes, motor pumps, furniture, cotton cloth, household chinaware, woolen yarns, carpets and carpet products, knit outer- and underwear etc.

Some economic organizations and units of industry did not fulfill production and output-sales goals. The targeted quantities of meat, sterilized canned vegetables and cheese were not produced. Not all economic organizations regularly received interdepartmental subcontracted deliveries. The ministries of electronics and electrical engineering, light industry, machine building, and internal trade and public services did not deliver to consumers some of the products in the interdepartmental subcontracting plan.

The plan of domestic services for the public was fulfilled 107.6 percent. The public's growing needs were still unsatisfied, particularly the following: metalworking services, maintenance and repair of motor transport vehicles, elevator maintenance and repair, construction and repair services etc.

The production cost of output was cut. Savings of 106 million leva above the planned target were realized, 82 million leva from savings of material inputs alone. The efficiency of industrial production was improved. Net output per 100 leva of fixed production capital assets reached 10.44 leva and aggregate profit per 100 leva of production capital assets 5.41 leva, while the productivity of labor rose 13.1 percent.

II. Agriculture

The necessary agricultural jobs were done during the quarter. Early spring application of chemical fertilizers to land sown to winter wheat was carried out. From 92 to 99 percent of the sown areas were fertilized. The best results were achieved in Burgas, Silistra and Pazardzhik okrugs.

The number of head of livestock on public farms and their average productivity are as follows:

Farm animals	1 Apr 81	1 Apr 81 as % of 1 Apr 80
Livestock and poultry, 000 head		
Cattle	1,414	98.8
Including cows	479	100.7
Sheep	8,652	96.1
Swine	2,853	100.4
Poultry	22,529	98.5
Average productivity per:		
Cow, liters	658	97.2
Laying hen, number of eggs	47	97.9

As compared with the first quarter of 1980, 3,186 more tons of livestock and poultry were purchased from all categories of farms, and 17,942,000 fewer liters of milk and 8,311,000 fewer eggs. The best results were achieved by Mikhaylovgrad, Plevan, Plovdiv and Ruse okrugs.

The repair of agricultural machinery was accomplished in good time. The state of readiness for most tractors and tractor-drawn equipment is more than 90 percent.

III. Construction

Construction and installation organizations accomplished construction worth 725 million leva, or 15.2 percent more than in the first quarter of 1980. Capital assets worth 378 million leva were put into operation. Some 5000 housing units were completed and delivered to the public. New kindergartens with accommodations for 760 were also put into operation. Started-up capital investment amounted to 1,039 million leva.

Broken down by individual economic complexes and ministries, fulfillment of the plan for construction and installation work and the growth rate of construction production and the social productivity of labor is characterized by the following data:

Economic Complexes & Ministries	% Fulfillment of Quarterly Plan for Construction & Installation Work	1st Quarter 1981 as % of 1st Quarter 1980	
		Construction & installation work	Social productivity of labor
Ministry of Construction and Construction Materials	109.1	108.6	146.5

Economic Complexes & Ministries [Continued]	% Fulfillment of Quarterly Plan for Construction & Installation Work	1st Quarter 1981 as % of 1st Quarter 1980	
		Construction & installation work	Social productivity of labor
Ministry of Transportation	118.9	109.7	117.9
National Agrarian-Industrial Union	105.7	107.7	131.2
Ministry of Power Supply	110.9	142.7	128.3
Capital City People's Council	101.1	142.6	199.5
Ministry of Communications	101.0	106.3	130.9

IV. Transportation and Communications

Volume of contracted freight traffic by all kinds of transportation was fulfilled 101.2 percent. Passenger carriage increased 3.1 percent, the increase in motor vehicle transportation being 316 percent and in urban transportation 3.3 percent.

The aggregate social profit plan was 117.0 percent fulfilled, and the net production plan 105.3 percent. The plan for the social productivity of labor was 106.0 percent fulfilled. The greatest overfulfillment was achieved in water and air transportation.

Material expenditures per 100 leva of revenues were cut 2.6 percentage points.

Some technical and economic indicators for the utilization of transportation facilities were improved. The average gross weight per freight train was increased 2.5 percent over the first quarter of 1980; the utilization of freight-car kilometerage was improved 0.44 percentage point.

Revenues realized from communications services performed increased 9.8 percent over the first quarter of 1980.

The postal system was enlarged by 12 PTT [posts, telegraphs and telephones] stations. Some 38,000 new telephone sets were installed.

V. Internal Trade

The plan for the total volume of goods turnover was 101.2 percent fulfilled in retail trade, 101.6 percent in the trade network, and 99.6 percent in public food service. The Central Cooperative Union fulfilled its plan 102.9 percent; the Ministry of Internal Trade and Public Services 100.5 percent. There was also plan overfulfillment in the following economic organizations: Motor Engineering and Automotive Service State Economic Trust 18.7 percent; Bulgarian Fruit State Economic Trust 11.0 percent; Fish and Fish Products SD [Economic Directorate] 6.0 percent etc.

The retail goods turnover realized in the first quarter was 2,746.4 million leva, which was 3.3 percent larger than in the corresponding 1980 period.

VI. Foreign Economic Relations

Foreign trade barter increased 16.9 percent over the first quarter of 1980. The increase that was achieved was due mainly to the more and more rapidly increasing barter with the USSR and other CEMA-member countries.

Trade increased with the developed nonsocialist countries as well as with the developing countries.

The favorable changes that have been taking place in export structure continued in the first quarter of 1981, too. The volume of goods with a high degree of processing increased more and more. Some 203.5 million foreign-exchange leva more of machinery and equipment were exported than in the first quarter of 1980.

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CRITICAL COMMENTS ON STATE OF ECONOMY, SET OF MEASURES

Rome LISTY in Czech Apr 81 pp 10-15

/Article by L. Zahora: "Supply Is Relatively Smooth, But..."/

/Text/ All Markets Are Not Alike

The report of the Federal Bureau of Statistics /FSU/ on results during the last year of the Sixth Five-Year Plan (1980) characterizes the situation in our counsumer goods market rather optimistically: "Supply in the internal market was RELATIVELY SMOOTH /emphasis by author/, yet it was not always in consonance with the structure of demand." If the Czechoslovak housewife, who constantly hunts and waits in line for goods, had read the FSU report, that institution would in January have been flooded with letters of indignation. Since, however, only a few specialized individuals read such reports, this wrath is voiced only in private conversations with co-workers during work breaks. If some of them had experienced a vacation in Hungary, there might be some nostalgic reminiscing about how it is different there, ample supply of quality goods in stores and no waiting. Someone might even remember an old wartime joke which went as follows: before the war, the sign on the shop was "butcher" and there was meat inside, while today the sign says "meat" and there is nothing but the butcher inside. It is certainly remarkable that, while per capita consumption in the CSSR is by many kilograms higher than in Hungary--and household furnishings are better, subjectively the Czechoslovak shopper feels much worse off, is greatly more dissatisfied than his Hungarian neighbor, while the latter often has to work much harder (a good portion must hold second jobs to maintain their living standards).

Where then should one look for the causes? First of all, in the fact that during the last decade the Hungarians have succeeded in establishing a CONSUMER MARKET, as opposed to our PRODUCER MARKET. The difference in terms stems from the difference in who really is the BOSS in the marketplace. When supply exceeds demand, the consumer is the boss and the producer must try to encourage him to buy, which can be done only when the producer is able to offer high quality goods at a fair price. To be the boss in the marketplace, to decide freely what and when to buy without fear that it would be unavailable the next day, is not merely an economic advantage, but also an important component of the overall psychological atmosphere of freedom where the individual is not manipulated.

In Hungary they have achieved this largely due to two circumstances: in 1968 they introduced an economic reform much like that which was just beginning in our country (the state does not control the enterprises through dictating what and how they should produce, but rather through financial instruments, especially tax policy, gradual exposure of the enterprises to world market trends, and the creation of elbowroom for small enterprise in the private sector; furthermore, the state was willing to adopt even unpopular measures so that price relations would more closely reflect real outlays, thus reducing state subsidies in production, etc.). In addition, the state is pursuing a reasonable policy of MARKET BALANCE, both via its tax policy (the system of high--at times even overly harsh--taxation of enterprises which prevents them from acquiring unearned resources, whether it be in the wage sphere or in capital investment), and through cautious policy in state expenditures, again especially in capital investment because, an experience of many years has demonstrated, it is largely excessive capital investment from central sources which, in all the countries of real socialism, has been the principal cause of market imbalance.

Hungary, however, is for the present an exception in the real socialist world. The established reality in the CSSR and elsewhere is a PRODUCERS MARKET in which demand exceeds supply, in which the customer does not shop but HUNTS, in which the producer does not serve the customer, but rather dictates to him and forces on him unsuitable goods.

The Problem Is Not Consumer Goods Alone

The above characterization is not applicable to the consumer goods market alone. It also holds for the situation which exists in enterprise relations, be it in the matter of raw and other materials, finished products, capital investment, or the labor force. While in this respect, real socialism does not normally speak of the market and, as to the labor force, it downright rejects such classification, this must be regarded as ideology, for even in real socialism the laws of the market are applicable, even though--as we will show later--in a highly distorted form.

We can first draw our conclusions on the situation in the market by examining data on delivery deadlines, even with respect to quite common products which abroad can be purchased immediately, in a week, a month, and which one has to order here 3 to 20, even 40 months and more ahead of time.

Let us visualize the situation of a procurement manager in any enterprise. The enterprise had received the validated plan for the first year of the Seventh Five-Year Plan (1981) at the earliest in late January or early February 1981, provided that the enterprise is exceptionally fortunate and is able to accept the plan without further "conflict proceedings" (for illustration, in the second half of last year, the Poldi United Steel Works in Kladno, had to prepare twelve variants of the enterprise plan for this year).

Given the existing delivery deadlines, the procurement manager had to begin ordering materials and subdeliveries six, twelve, or more months earlier when the plan was still "in the stars."

"Firing from the hip" has thus become the basic working method of procurement managers. They therefore "fire" (order) preferably more because that way they have a better chance to hit the mark. But when the enterprise does finally receive the definitive version of the plan, the confusion starts again: orders for materials in cases the procurement officials have "missed," are being rescinded (except that often by that time the requested supplies had already been delivered, or even production of certain ordered goods begun), while in cases where the initial orders were insufficient or of the wrong type, additional and sometimes different materials, as well as products, stemming from the changes in the plan, are being hastily reordered.

On the one hand, therefore, we create fictitious "needs" which fill the production capacity of the enterprises, while on the other, real needs reach the production process with considerable delay--and all this in an economic system which boasts that, unlike "spontaneous capitalist economic anarchy," it is able through prior planning to take into consideration all the vital economic relationships.

The disproportion between supply and demand which emerges in such a "planned" economy, reaches enormous sums and has been increasing each year in terms of ineffective "surpluses" by 20-25 billion korunas. In certain items the enterprises are supplied hundreds of days, even years, ahead of time (e.g., in 1979 engineering enterprises were on the average presupplied with screws for 252 days, common instruments for 218 days, armatures for 195 days, etc., and these averages, of course, conceal additional sizable differences between enterprises in the various types of product), whereas other needed supplies are nowhere to be found in warehouses, while new orders for "hard-to-find" items are returned by producers slashed by half, or even down to zero, due to insufficient production capacity.

The effects of this permanent state of tension between supply and demand stemming from the short-term (annual) centrally-controlled planning cycle, is seriously exacerbated by the effects of the long-term (five-year) planning cycle, especially with respect to its capital investment decisions. However, hard the center may try to balance these decisions, due to the enormous complexity and dynamism of the problem, it will never succeed in controlling its secondary effects on the situation between producers and consumers, and on the overall balance of supply and demand. What this means in practical terms can be seen in the construction of the Dukovany nuclear power plant, i.e., a project handled with extraordinary care by the planning center. After five years of construction, it was found that the capacity of the engineering enterprises which produce the so-called passage parts and armature blocs /pruchodky a armabloky/ on which depends the fate of future construction, will cover only about HALF of the needed quantities, and this considering that the same items are needed at Jaslovske Bohunice.

In a situation such as that (quite common in central capital investment planning), only two solutions are possible, i.e., import which, due to the tenuous hard-currency situation, can hardly be considered, or crossing off some "less important" project and accelerating a reorientation of the engineering assets. First of all, this is very expensive and, secondly, the "crossing off" will affect other consumers who will again have to find their own way out of the mess, no matter how much it costs. Thus the tension in the marketplace grows, rather than diminishes.

Can the "Set of Measures" be Expected to Provide Solutions?

It is not as if the "responsible officials" were not aware of this situation. When in a recent television interview the reporter pressed the Finance Minister, L. Ler, against the wall a bit by asking if it was correct to separate capital investment projects into those "binding" and those others, and whether the plan should not be balanced so that all projects became equally binding, since otherwise there is confusion in producer-customer relations, the minister exhibited uncommon courage and expressed his PERSONAL OPINION that it should indeed be that way. He added quickly, however, that the planners, of course, have a difficult job. Unlike some of his colleagues, especially those "higher political officials," Ler does recognize that no central records system, even with the use of the most modern computers, is able to organize producer-customer relations as well as a functioning, centrally-regulated market mechanism. No one, of course, will voice such opinions openly because he also knows that PROPONENTS of such views cannot be ministers in the system of real socialism. I Admit that to answer sensitive questions publicly is difficult under the circumstances and that the given "reply" attests to a certain verbal skill, since it creates the impression that the question was answered (which it was not) and that the respondent is not as much of a fool as some others.

Since minister Ler is chairman of the government committee under whose auspices the "Set of Measures" had been prepared, we can assume that not even this intervention into the future mechanism of our economy, bears much hope, since otherwise he would have emphatically referred to it in his reply.

It is true that anyone who is satisfied with words and proclamations, could believe that this document has not ignored this problem when it decrees: "at the final stage of the detailed breakdown of the plan, PRODUCER-CONSUMER RELATIONS MUST BE DEFINITELY DELINEATED. In the situation as we have described it, such a "decree" is nothing but wishful thinking which no one can or does take seriously.

The same holds true with the demand that the wholesale supply be moved from the customer to the producer, or rather to centralized marketing organizations such as those which are common in all normal market economies, to make a smooth flow of supply possible, while greatly reducing the state of stock in the national economy. For more than a quarter of a century, this requirement has been repeated in dozens of "party and government resolutions," obviously without any visible results. It is simply beyond the ability of an administratively directed index system to master this problem. An enterprise which lacks assurance that it will get in time what it orders, will insist that its procurement management buy up anything that is available, regardless of cost involved in the high state of reserves (including losses from deterioration resulting from overly long storage), because losses from possible production disruption (especially in wages and premiums) could be even higher. Also, who knows but that some of the "surplus" goods and products might not at some time in the future become more valuable than money?

Black Market

Here we come to another market phenomenon under real socialism, the rise and blossoming of the "black market." It is an inevitable consequence of the insufficiently functioning "legal market" and an accompanying feature of any allowance economy which is what the system under real socialism actually represents (especially with respect to relations between the enterprise and the center). The more pronounced the imbalance, the more widespread the "black market" sphere, and the more diverse its forms.

As to the consumer goods market, it is not always enough to have money, one must have another "qualification," namely, a reliable acquaintance in the right place who is able to provide services for a suitable reward in return. Thus he who wishes to eat steak every week, a commodity not seen on the market by the average citizen for at least a decade, or without standing in line for at least something better than low-grade pork, should keep this in mind when he is young and plan on becoming a physician, preferably specializing in obstetrics, a surgeon, a specialist in internal medicine, or perhaps even a maintenance man. Whoever enjoys a good detective story, needs a friendly book seller, while anyone desiring a quality sweater, has hope only if an acquaintance employed as a saleslady holds it for him under the counter. It is even better to befriend a floor supervisor or even the store manager because quite often desirable goods are sold (along with appropriate "tips") before the item even reaches the counter. And so we could continue ad infinitum.

Among the enterprises, the practices of the "black market" are even more variegated and creative imagination has no bounds. It begins early with the delivery of goods when a smart customer appears not to be too concerned about the quality of the delivered products because he has long known the process and the consequences of a possible complaint, i.e., due to the labor shortage and low-quality raw materials, we cannot deliver better goods, either you take it as is or you'll have to request imported substitutes--so speaks the supplier from the producer's market, and the customer usually capitulates. He cannot count on import and he will need the domestic producer again the next day or the day after that. In order to maintain friendly relations, the customer is even willing to provide other "comradely services," for example, if the supplier is threatened with the loss of premiums for failure to fulfill the quarterly plan, the customer gracefully "accepts" goods which have not even yet been produced, this being a gesture of good will to be repaid by similar "services" by the supplier....

The enterprise-customer, however, must be much more agile once it has persuaded the supplier to favor its new requirements. Various writers in Hospodarske noviny /Economic News/ have frequently dealt with the question of what qualifications officials in the supply of capital investment components should have, referring specifically to education and expertise in their area, knowledge of regulations, etc. In reality, the supplier's more important qualification is when he knows and how well he is able to bribe "tactfully." It is an open secret that in negotiating deliveries, especially when dealing with rush jobs, the suppliers travel with bulging briefcases and even suitcases (the most desirable are enterprises producing attractive merchandise--"samples" in the form of gifts create a conducive atmosphere for successful negotiations). Various "hand-to-hand" cash offerings from a fund available to managers of appropriate units and which are paid directly "in hand," normally are not used to reward suppliers, but rather for bribes to appropriate personnel on the producer's side.

All this is rather tame in comparison with what happens in dealings between the enterprise and the center (association or ministry) on the subject of plan indicators, amounts of allotments or capital investment, or hard-currency allocations. From time to time, corruption affairs surface (for example, former director of the Mlada Boleslav Automobile Works, who sold cars at a low price to various prominent officials, bribes to foreign trade enterprise officials in the form of pocket calculators, tape-recorders, or even foreign-made automobiles, as in a story published some time ago--

obviously with a clear objective in mind--by arrangement with the Ministry of Interior in the magazine Signal). All this demonstrates the magnitude and character of the "black market" operations. Most of this "grand style" corruption remains, of course, under the lid, since it involves individuals who are highly-placed in the party and state apparatus. Moreover, cases like the Szczepanski affair in neighboring Poland (we also had "our" General Sajna) demonstrate what such revelations can do to public opinion.

Impassable Barriers

On the example of Hungary, we have indicated that a really lasting solution cannot be expected through insignificant, cosmetic adjustments of the central-indicator mechanism of economic operations. Not even this example, however, is as yet as attractive as might seem from a few brief (and thus probably overly simplified) lines in which we characterized it. Its vulnerability is inherent, first of all, in its ties to CEMA and its deformed price system, totally divorced from realistic value relationships as they exist on the world markets. Herein lies a permanent danger of erroneous capital investment decisions (there is no objective criterion for their effectiveness) which may imperil the balance of internal Hungarian trade (it is not by chance that Hungarian economists increasingly deal with this problem in the specialized press, urging its resolution). Even in Hungary, the bulk of capital investment decisions is still made at the center, which means that should someone "bolder" come to power, the balance of the market will vanish.

A real and lasting solution can therefore be expected only from a RADICAL RECONSTRUCTION OF ECONOMIC OPERATIONS which would lead especially to the abandonment of the centrally-managed indicator system of management, to the renewal of flexibility and realism in price mechanisms, including their relationship to world prices, to a shift of the bulk of capital investment decisions from the center to the enterprises and their associations (conglomerates, combines, etc.), and a shift from administrative to largely economic instruments of a centrally-regulated economy.

Many experiments with various "reforms" or "improvements of the management system" which have been tried in the last two decades in all the countries of real socialism, especially in economically difficult times, invariably lean in the above direction. However, they always stop half-way, or even a third or a fourth of the way when they approach the various barriers, the breaching of which they fear for various reasons.

The first of these is the ideological barrier which in Czechoslovakia is the strongest today (as opposed to Hungary where it plays a negligible role). Following the Soviet invasion and occupation, the ruling ideologies in a savage campaign against the reform, placed the Mark of Cain of revisionism of anything that deviated from the most rigid image of a centrally-managed administrative economic model. The market concept became synonymous with impulsiveness and anarchy, and any attempt to apply it became a signal for suspicion of subversive intents against socialism. It is no wonder that when desperation led the Czechoslovak party and state leadership to introduce an "improved system of management," the steps outlined in the "Set of Measures" in such an atmosphere, go less than a quarter of the way, and hardly anyone believes that they can bring about something that has been needed for more than twenty years, namely, a turn from an extensive toward intensive economic development.

Then there is the barrier protecting the prerogatives of power. A radical economic reform creates a new gravitation with respect to people in leading positions, not only in economy. The more simple-minded, corrupt, and compromised the team in power, the greater its fear of any kind of change. It is no accident that the more radical economic reforms have been initiated following leadership changes (Khrushchev in the USSR, Kadar in Hungary, the post-Novotny regime here, and obviously the Polish leadership today).

Not insignificant, however, is also the social barrier. The thirty-year reign of the administratively-managed model, created in the population, especially among the young workers, habits of comfort at work, especially under today's high (compared with the amount of work performed) expectations of a certain living standard which, under conditions of a radical economic reform, would be unthinkable. The current Polish situation again demonstrates this clearly. One can certainly understand the radicalism of the Polish workers who have been deceived by so many governing collectives with promises of future social welfare, while these leaders were bringing Poland to the brink of economic abyss. Stated objectively, however, the Polish workers' demands in the existing situation are beyond the realm of reality and even a government determined to embark on a radical economic reform, will not be able to satisfy them within a short time. If such a reform is to survive, very tough measures MUST be adopted, a BALANCED MARKET must be established as quickly as possible. Without this, the forces driving the economy toward growth and effectiveness, will lose their desired effect. The necessarily tough measures, especially in the initial phases, will be unpleasant for the population as a whole, even though its overwhelming majority bears no responsibility for the present economic plight. The countries of real socialism, of course, have the "historically bad luck" that the question of guilt can only be resolved within the limits stemming from the present global division of power. And so it seems that the best hope for the Polish workers is for Kania to become at least a Polish Kadar.

Come to think of it, after a decade of experience with normalization, even we could do worse than finding some sort of Czech Kadar.

/Unattributed article: "We and the World--Some Facts on the CSSR Economy"/

/Text/ Responsible specialized institutions have for several years now monitored the technological and economic quality of Czechoslovak products in comparison with world standards. The unsatisfactory situation in trade and payments balance has brought the results of this monitoring, until recently accessibly only to a narrow circle of "authorized personnel," all the way down to the production plants. The picture is depressing (the data up to 1967 represent selected groups of sectors, while in later years they include all industrial branches, except the energy industry).

Quality of New Products

It is characteristic for our industry that it introduces few new products on the market. Demand exceeds supply, production is master of the market, why then should it complicate its operations in the production program.

The share of new products in the overall value of production is consequently only 10 percent annually. In recent years, it developed as follows (in percentage):

1975	1976	1977	1978	1979
12.1	8.2	8.8	9.9	11.2

The product may be new and, from the customers viewpoint, more expensive, while by international standards, it may already be obsolete. On the average, less than a fifth of the products are of world quality. In the course of the last five years, the share of overall production of products which would qualify in world competition, was as follows (in percentage):

1975	1976	1977	1978	1979
33.4	15.1	13.3	14.6	16.6

From the data on new products and their quality, it emerges that we have brought to world standards a mere 2 percent of overall annual industrial production. One need not elaborate at length to show the problems this causes in foreign trade.

Erroneously Assessed Raw Materials

In judging export effectiveness, we often use the so-called kilogram price, especially in export of engineering products. Even though this is a very rough indicator, it nevertheless provides an accurate enough picture of our current position in world export of engineering products. Data supplied by the Foreign Trade Research Institute, characterize the situation as of the middle 1970's as follows:

One kilogram of engineering product is generally sold by exporters (world average) for 4.4 U.S. dollars. The United States gets 12.36 dollars per kilogram, Japan 5.16, Western European countries 4.42, while Czechoslovakia gets only 1.84 dollars per kilogram of engineering product.

The Size of Our Losses

Czechoslovak enterprises are not directly subject to world prices in export and import. The differences between internal (wholesale) prices and those on the foreign market are covered from the state budget. Propaganda depicts this feature of a centrally-managed economy as a significant plus which allegedly protects the socialist society against economic crises phenomena of capitalist economies. Indeed it protects, since the producer does not insist that products measure up to world standards and the importer does not insist on savings in imported raw and other materials.

What this system is costing us was revealed at last year's conference on improved targeted planning at the Higher School of Economics, by the Federal Minister of Finance, L. Ler. According to his report, the amount the state expends on the price differences in foreign trade relations, represents 30-40 percent of the national revenue increment.

The "improved" management system will apparently change little in this, since the incentive stimuli in enterprises toward achieving better prices in export and import, are too weak in comparison with the stimuli which lead to indolence and conservatism in production.

We Are Losing the Ability to Compete

The CSSR position on the world market is constantly becoming worse. In 1965, our share in world commerce was 1.5 percent, while at present it is 0.9 percent. At the same time, even our share in the overall CEMA foreign trade turnover decreased from 12.98 percent to 9.48 percent.

Particularly serious is the development in the engineering industry which has always been considered the keystone of our export operations. Studies by the Foreign Trade Research Institute show that export had dropped from 2.78 percent in 1965 to 1.56 in 1977. The CSSR has fallen from 13th place among world exporters of engineering products and facilities in 1970 to 15th place at present.

This drop does not concern engineering alone. During the past 15 years, the growth of turnover in Czechoslovak foreign trade was substantially smaller (caused, among other things, by world inflation) than similar growth in the world, including developing countries the CEMA states. While there is no question but that conditions on the world market have deteriorated for all states, Czechoslovakia has been unable to adapt to this harsh reality. In order to at least maintain our presence on the world markets, we export cheaply, while no one will rescue us from the necessity of paying high import prices. The consumer suffers increasingly from the ineffective foreign trade operation, while the country loses through export of raw materials instead of finished products. Meanwhile, our foreign debt is growing.

/Article initialed P.F.: "Hospodarske noviny Poll"/

/Text/ The economic weekly of the CPCZ Central Committee, Hospodarske noviny (henceforth HN) conducted an opinion poll at the beginning of 1981, which focused on "labor initiative," in other words, "the most serious obstacles in the application of informal and dedicated personal initiative." Among other things, the survey found that "reports on early fulfillment of the plan are decreasing." It is allegedly because of this that "the importance of creative dedication to work is increasing." The poll is interesting for a number of reasons:

--the respondents were important officials whose views conspicuously coincide with everyday experiences of most of the citizenry;

--it confirms the fact that initiative, pledges, and competition, are still considered the principal--if not the only--instruments for bringing about growth in production and productivity, as confirmed by various party documents and speeches by leading officials, regardless of the stimuli, or rather the obstacles to their implementation;

--not one of the whole "cast" of important personalities of economic, political, and cultural life--as they were characterized by HN--mentioned the deeper causes of the phenomena they cite as negative. They merely note (even this, in comparison

with the eternal self-praise of the leading "personalities," is a step in the right direction) that it is "hard to believe that one still hears (from their own mouths) warnings of formalism, but also words about irresponsibility and incompetence, envy, greed, obsolete usages, doubt, even cases of fear and cowardice, as well as other obstacles which hamper application of dedicated personal initiative."

--it is not without interest that only one member of the "cast" of respondents mentioned the "Set of Measures" as a possible instrument for the resolution of our national economic ills (in the Slovak REMP).

Even the brief summarization of the poll in the cited HN paragraph contains mention of many serious obstacles to "initiative and personal dedication." We will list some of the most serious (within quotations, emphasis by author):

1. Shortage of Materials, Supplier Morale

"All informal initiative and peoples efforts must be based on adequate AVAILABILITY OF MATERIALS, SHORTAGES must not stand in the way. There are signs of POOR QUALITY PRODUCTION in certain sub-deliveries...."

"Inability of managers to ensure a smooth and timely flow of MATERIALS AND SPARE PARTS."

"Many economic managers do not guarantee INTRODUCTION INTO PRODUCTION, and fail to create conditions for smooth operations in production and construction."

"Uneven DELIVERIES OF MATERIALS AND INTERMEDIATE PRODUCTS from external suppliers..."

"SHORTAGE OF SPARE PARTS, APPROPRIATE TECHNOLOGY, MACHINERY, EQUIPMENT, etc."

"SHORTAGE OF MATERIALS CAUSING IDLE MACHINERY...."

"Current level of CUSTOMER-PRODUCER relations...."

2. System of Rewards, Egalitarianism

"...INSUFFICIENT DIFFERENTIATION IN REWARDING according to amount and quality of work performed, in other words, labor initiative."

"Insufficient utilization of MERITORIOUS WORK as a basis criterion in evaluating individuals and collectives."

"Demoralizing effects occur when people try hard, manage to confront complex tasks and yet receive the SAME PAY AS THE SHIRKERS."

"There are many obstacles, of which among the worst is INDIFFERENCE...caused by INSUFFICIENT DIFFERENTIATION IN LABOR REWARD..."

3. Centralization, Bureaucratization, Formalism

"First it is HARSH CENTRALIZATION AND AUTOCRATIC MANAGEMENT METHODS...little room for personal initiative..."

"FORMALISM which undermines personal initiative."

"Giving more credit for the NUMBER OF PLEDGES than their concrete implementation."

"Unwarranted growth of the ADMINISTRATIVE APPARATUS and formalism which goes with it."

"Too many REGULATIONS AND DIRECTIVES which are often contradictory."

"Little opportunity for making DECISIONS at the worksite."

"INCOMPETENCE IN SPECIALIZED FIELDS, bureaucratic indifference, haughtiness, alibism."

"When people are forced to work on projects of which they DOUBT THEIR USEFULNESS, one cannot expect initiative behavior."

"Initiative is possible only when people see social (and other) RESULTS of their labor."

"I consider an INDIFFERENT STANCE on what happens in our society, the biggest obstacle."

I have listed brief excerpts from the replies given by the "important personalities," presumably competent, responsible managers. By and large, they cite problems which are well known and which have existed for many years.

The people have known them for a long time and wonder why official documents have never contained a public analysis of their causes.

This was again missing in the HN survey. While the organizers are aware of the gravity of the situation, they maintain somewhat poetically that "overcoming the present obstacles opens the doors to new initiatives, just as under a shifted rock, green grass appears again."

I am afraid that the participants of the poll, despite their prominence and consequent influence, did not shift the rock and therefore no green grass will appear as a result of their responses. It may be that some of them would like to say something on where the problem really lies, but they did not dare. For this they would have to go to the roots of the cited shortcomings. However, by doing that they would overstep the "room for personal initiative" at the risk of unpleasant consequences, according to the formulation of one of the participants.

No one therefore speaks of the system which produces, encourages, and spreads all these obstacles, of the methods in selecting responsible officials, etc. No one, for example, mentioned that CPCZ members are financially and functionally favored over the others, etc. No one dared to ask whether the obstacles might be related to the overall social and economic conditions in which they have flourished for years, nor where one should search for responsibility for them.

Lack of initiative is not an inherent "national" trait of our people. It exists as a reflection of different and, for our economy disastrous, factions, namely, how to conceal, dissimulate, trick, speculate, go around, camouflage, bribe, etc. What was it that shunted peoples initiative in this direction? Who is responsible for it?

Let us quote a passage from a Rude pravo /CPCZ daily/ editorial of this year in which they promise that the party line will remain firm: "The party has nothing to hide. On the contrary." This gem of faulty Czech is part of the journalistic jargon of normalization. It is not a statement analogous with "we have no shortage of phrasemongers, on the contrary," no, the author of the editorial had something else in mind: "The party does not conceal from the broad public its program and individual intentions, it strives to explain to them that its policy parallels their interests and needs, and on this basis draws them into participation in its formulation, implementation and control" (Rude pravo, 5 January 1981).

Thus all is well and the Hospodarske noviny can repeat its survey at the end of the year.

9496
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AUTOMATED MANAGEMENT SYSTEMS IN CSR AGRICULTURE

Bratislava EKONOMIKA POLNOHOSPODARSTVA in Czech No 3 Mar 81 pp 104-106

[Article by Eng Jindrich Babicky, Sectorial Enterprise for Rationalization of Management and Computer Technology, Ministry of Agriculture and Nutrition of the CSR: "The Set of Measures and the Further Development of Automated Management Systems in Agriculture"]

[Text] The Set of Measures for Improving the Planned Management System of National Economy After 1980 has assigned to computer technology an extraordinary role in detecting and exploiting reserves in production and the economy, and in detecting, exploiting and generally intensifying the decisionmaking processes on all levels of management.

Special emphasis is placed here on the expansion of the range where a higher generation of computer technology may efficiently affect every area of our economic life. This calls primarily for the application of increasingly more sophisticated economic-mathematical methods, technical and planning calculations for prognoses, proportional planning and operational management of production, supplier-consumer relations, etc.

On the basis of the experience gained in our field, it may be said that the current computer technology is successfully dealing with mass processing of socioeconomic (accounting and other) data and their analyses. Although during the Seventh Five-Year Plan, we are facing in this area a demanding task stemming from the comprehensive horizontal introduction of socioeconomic data ASR [automated management system] in the whole branch of our agriculture, i.e., in every JZD [unified agricultural cooperative], state farm and cooperative agricultural enterprise, and its interrelation along the entire vertical of the management, it is evident that we must plan ahead in terms of exploitation of available techniques. In this respect the Set of Measures demands that five basic problems be resolved.

Basic Problems for the Oncoming Period

First, this involves the construction of an automated system for planning calculations in accordance with programs aimed at overall improvement of planning procedures. This concerns above all automated processing of balance links in natural and value expressions, optimized calculations in the process of planning and implementation of programs, solution of proportionality of individual factors in problems

with a variable resource structure, and so on. In this conjunction the Sectorial Enterprise for Rationalization of Management and Computer Technology is developing a system under the title "Production-Financial Plans" [VFP] in order to facilitate correlations of the plans for all sectors of enterprises and intraenterprise organs. Experience based on optimal models developed by experts in the Research Institute for Economy in Agriculture and Nutrition was applied in the planning of the VFP subsystem. The future task inplanned calculations of the ASR involves the construction of planning and standard data banks. One of the basic preconditions for the fulfillment of this objective is to complete promptly the planning of a base for technical and economic standards and norms, which must become the priority for the entire scientific research base of the Ministry of Agriculture and Nutrition.

The second task involves automation of management in supplier-consumer relations. At present, the use of computers in this area is focused on automated supply and marketing operations. An experiment which is now under way in Vyskov Okres for the purpose of balanced use of spare parts and operational solution of their requirement may become a valuable aid in the implementation of supply and demand coodination in selected VHF (for instance, when fulfilling the procurement and supply coordination), in controlling the fulfillment of contracts, in simulating marketing lines, etc. The efficiency of the ASR in supplier-consumer relations depends considerably on more intensive standardization of digital readout, computer programs and if possible, of technological equipment for whole groups of supplier-consumer organizations entering such relations.

The third task on which the Set of Measures focused attention is the development of automated data systems facilitating control and assessment of efficiency in the process of replacement as a whole. In terms of current accounting and calculation systems the process of replacement in an agricultural enterprise has been recorded and processed thus far by the familiar ASR model of identifying information (also known as ASR of the agricultural enterprise and okres) with its subsystems, namely: Capital Assets; Animals; Supplies; Workers and Wages; and Accounting, including Production Calculations.

The model project of this ASR has been expanded in agricultural enterprises over the past 2 years to an extent unprecedented in other branches of our national economy; thus, 94.5 percent of all our JZD and state farms are linked with that type of ASR, of which 94 percent use the Capital Assets subsystem, 78.3 percent the Animals subsystem, 63 percent Supplies, 69.5 percent Wages and Workers, 64 percent the Auditing Evidence and Production subsystem, and 20.2 percent the ASR of planning and critical data. It may be mentioned here that this system operates very well in monthly cycles so long as it is used comprehensively and so long as its output is also fully utilized. Thus far the resultant systems of this ASR have been used at 30-40 percent capacity, which is no fault of the system itself since it is due mostly to the fact that we have not taught its users how to operate it more efficiently.

It is quite obvious to us, however, that in the future the current ASR projects and programs will not serve us sufficiently to record and analyze all correlations occurring daily in the process of replacement. It is necessary to advance gradually toward application of more complex methods than the economic, target and cybernetic models. Nevertheless, in our opinion significant developmental stages in the application of computer technology must not be disregarded. We must harbor no illusions that a person who can grasp basic principles of the operation of mass data-processing

systems today may be capable of casually operating econometric or cybernetic models tomorrow. This kind of transition will indisputably require systematic training not only by the user organizations but also by research and development itself.

The fourth vital task related directly to our field is the adaptation of the linkage between automated management systems of the enterprises and automated management systems of technological processes. Obviously, at present the application of microprocessor technology is being experimentally tested in our agriculture. The basic principle of this technique is the integrated circuit with a high degree of integration in conjunction with effective sensors used for automated management of technological processes in animal production, particularly in dairy cattle raising. Programs applying this technique to other animal production branches and involving the operation of self-propelled automated equipment are now in the planning stage. Initial calculations suggest that the application of microprocessors demonstrates extraordinary efficiency in conserving power, fodder, labor forces, and so on.

From the point of view of comprehensive exploitation of computer technology, microprocessors are particularly important for collecting and analyzing primary data for operational and higher forms of management. We realize that this technology may gradually replace the still manually processed primary evidence in the production and labor processes, namely, by completely accurate and rapid collection and transmission of data which may be analyzed for operational management, for example, in minicomputers or other suitable computer systems.

At present, we are not far from potential interconnection of computer technology with the direct automated management system of technological processes. This interconnection will determine the essential functional location of every computer system. Within this technological complex the microprocessor, next to its managing function, will supply data for the minicomputer which after processing them will use these and other systems for operational control and simultaneously will preprocess selected information for analytical and planning operations in the medium-sized computer and in the central information system of individual branches. This does not imply that the construction of this technological complex will not face complex problems and numerous difficulties. In terms of projection and programming alone it cannot be presumed that every operation in an enterprise may be controlled by microprocessors. Many operations in the production and other sectors will continue to be controlled by the classical method and the technological data-processing system must be adapted accordingly. Furthermore, as our initial experience has shown, microprocessors literally raise the power of information. For technical control of their processing and evaluation, programs for their selection must be planned in detail so as to give priority to data that are the most relevant for managing operations.

Last but not least, the fifth task of the Set of Measures is the construction of a standard data base, the development and use of standard designs of cross-sectional operations facilitating integration of individual levels of the automated control systems. In this connection, our plan for research and development of our field focuses on the establishment of so-called multilevel ASR in the branch of agriculture and nutrition. This is a most demanding but also at the same time a socially important task which in our branch interconnects the ASR of an agricultural enterprise and district along the line of the District Agricultural Administration, the Regional Agricultural Administration up to the ministry; at the same time it interconnects the ASR with information systems of agricultural service organizations and in its final

form, also with the processing industry. The solution of this broad range of problems demands that the data base of the objects of information integration be unified, registers be established for general use, methodical indicators in planning, statistics and bookkeeping by systematically compiled, and uniform classifications and digital readout be consistently enforced statewide. In this respect, the sectorial enterprise for a long time has been operating integrated ASR of biological processes in vegetable and animal production; its achievements have been highly commended at various CEMA sessions. In addition, several agreements on joint use of the data base and gradual integration of individual ASR models have been concluded with economic production units within and outside the ministry as well as with the Czech Bureau of Statistics.

From the above brief outline of tasks stemming for computer technology from the Set of Measures, it follows that efficiently used computers are gaining an increasingly more significant role in the whole process of management. This was confirmed recently at the fifth independent session of the Assembly of the People which reviewed the introduction of electronics in our national economy. Reports in the media as well as the discussion in the assembly mentioned several times that the development of computer technology in our agriculture had achieved good results and that this branch had provided advantageous preconditions in terms of technology and organization of the production for a far-reaching introduction of electronization and cybernetization.

Current Base of Computer Technology for New Tasks

In conjunction with the tasks facing our agricultural computer technology, it is also advisable to assess its potential. The main computer technology base in the agriculture of the CSR is concentrated in the Sectorial Enterprise for Rationalization of Management and Computer Technology at the Ministry of Agriculture and Nutrition of the CSR. This sector, with its 23 subplants and 7 computer centers, has at its disposal 35 A 100 punchcard computers, 23 Tesla automatic computers, 3 EC 1030 computers, and 7 EC 1033 computers. Their total annual capacity amounts to 312,000 productive machine hours at double-shift operation. The actual output, particularly in automated computers, exceeds that capacity by roughly 20 percent, due primarily to a higher rate of work shifts which amount to 2.33 shifts per day.

Next to this already quite advanced computer technology in our field, we presume that several additional medium-sized computers operating in agricultural enterprises will be integrated and interconnected, in accordance with the Set of Measures, with the program for rationalization of management and computer technology systems. Moreover, minicomputer technology is gradually being introduced in our agriculture and the already mentioned microcomputer technology is also being tested. Experience has shown us that without uniform concepts and planned deployment of the new computer technology we would face serious difficulties. Minicomputers serve as a typical example. Isolated efforts by certain enterprises to obtain minicomputers have often led to a situation where a minicomputer is installed without previous analyses of the data base and frequently enough in a system that does not correspond with the needs of operational control. This results in underutilization of this relatively expensive equipment with rather high annual operating costs in the range of about Kcs 1 million. Therefore efficient use of the computer-technology potential demands unconditionally uniform, coordinated and well-planned acquisition and deployment processes which will combine the interests of the enterprises with the interests of the whole branch.

From the above statements, it follows that there are four systems of computer technology operating in our agriculture at the same time (1) punchcard computers, 2) automated medium-sized computers, 3) minicomputers, and 4) microcomputers). Each of those systems has its specific purpose in terms of time and function.

Punchcard computers which, as known, have played a meaningful role in the process of automation of data systems during the Fifth Five-Year Plan are being phased out and gradually eliminated. In view of the fact that, it operational, these computers can still perform many simpler tasks in mass data processing, such as daily involving, summarization of auditing records, etc., it would not be correct to phase them out too hastily.

The Tesla computers, especially the computers of the EC series, will gradually take over the comprehensive horizontal processing operations of the ASR identifying data. We envisage that this whole task will be accomplished in 1982 and for that reason, it will be necessary to supplement the equipment stock mainly in those areas where new computer technology has been introduced belatedly (particularly in South Bohemia, West Bohemia and East Bohemia). Among other things, this model of ASR will provide the main data base for the central information system; along with its comprehensive horizontal introduction we are using this type of computer to resolve more complex tasks in planning and decisionmaking procedures, such as the already familiar subsystems of fodders, fertilizers, fodder crops, etc., where the simulating factors are introduced with the application of a standard base. In the sector of optimated model technologies we continue to introduce optimal models for the deployment of agricultural production in okreses and enterprises. The CPM [Critical Path Method] method represents a very successful model method based on the analysis of the critical path. In the past period it has been successfully introduced in the District Agricultural Administration in Kladno, Prague, Brno, Opava and other areas, and contributed significant savings to our economy during the organization of harvest operations.

As for minicomputer technology, our experts are concentrating on the preparations of its program for the purposes of operational control. Programs for concentration and assessment of data concerning intraenterprise production with chronological periodicity of 24 to 48 hours (no later than at the end of the decade) will be completed this year. These data may be subsequently transmitted in a preprocessed form to the medium-sized computer which will simplify data collection and reduce its costs below the current level; at the same time, it will make it possible to cut short the schedules for the delivery of output tabulations by the computer.

However, it is not enough to use minicomputers exclusively for processing operational data and for dispatch control. We intend to offer several simpler model technologies for the use in our agriculture to facilitate simulation of several variants in seasonal work (for instance, harvest in rainy or dry weather), transport, changes of fodder sources, etc., which our managers cannot achieve in all links of the management.

We anticipate that the fourth computer system based on microcomputers will enhance the role of computer technology in the development of our branch.

In general, it may be said that the current stage of computer technology is characterized most of all by its highly dynamic development, its increasingly better ability to resolve complex problems in the management of production, sales, supplies, economy, etc., and its escalating potential in processing of the information for prognoses, concepts, plans and operational control, including the introduction of more sophisticated model methods. This potential of computer technology may be utilized only if two vital preconditions are met: on the one hand, we must be thorough in enforcing uniformity and interrelation of computer systems, and on the other hand, it is necessary to step up substantially the efforts for programming and utilization of computer technology by of its users, which cannot be accomplished without more intensive education of both the users the operators of computer technology.

9004
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FUTURE RESTRUCTURING OF CHEMICAL INDUSTRY DISCUSSED

Prague HOSPODARSKE NOVINY in Czech 24 Apr 81 p 3

[Article by Eng Dusan Dvorak, Candidate for Doctor of Science, Director, and Eng Jindrich Kubecka, Technical Economic Research Institute of the Chemical Industry, Prague: "Chemistry at the Crossroads; Adaptational Problems of the Czechoslovak National Economy"]

[Text] In connection with the commencement of work on the outlook for Czechoslovak national economic development to the year 2000, discussions have been going on a various levels concerning the outcome of the current development of the Czechoslovak chemical industry and concerning the level of chemical utilization in our national economy and its effectiveness, particularly in relation to foreign trade. This article brings together and summarizes some of the findings and conclusions of economic research on these issues.

During the fifth and sixth five-year plans, the Czechoslovak chemical industry entered into a qualitatively new stage of its development which was made possible by the number and size of newly constructed production units comparable to those in Western Europe (and the gradual construction of two petrochemical centers with large-capacity production facilities for basic polymers and the raw materials for their production), by the greater satisfaction of national economic needs for chemicals (a per capita production and consumption of plastics, chemical fibers and synthetic rubbers, and a usage of chemical fertilizers per hectare of agricultural land equal to the levels achieved in developed countries), and last but not least by an increased degree of integration into the international division of labor.

The construction of a domestic petrochemical base is without doubt an important benchmark in the development of that whole sector, because it is this which to a great extent determines the production structure for chemicals for the next 20 years, while at the same time providing a broad range of chemical raw materials for related products. We are not facing the problem of the optimal utilization of this base, above all through the development of its horizontally and vertically related final products. It is a matter of choosing a mix which would be optimal for Czechoslovak conditions, without duplicating more than 20 to 30 percent of

the world mix, that is, it is also a matter of the optimal integration of the Czechoslovak chemical industry into foreign economic relations.

Current Trends

We consider the following characteristics to be the most important for the current position and significance of the chemical industry in the foreign-trade relations of the Czechoslovak economy:

--A relatively high degree of openness to imports, and a relatively low degree of openness to exports. The share of imports in the overall resources devoted to the use of chemicals in the Czechoslovak national economy fluctuates in the area of 25 percent, which is roughly comparable to analogous indicators of other industrially mature countries with comparable economic potential, while the percentage of goods produced by the chemical industry and devoted to direct exports amounts to about 14 percent, or about half as large as would be expected from the viewpoint of international comparison.

--Foreign trade in chemical products displayed a constant tendency toward the growth of a passive balance, culminating in the 1975-1977 period, when this reached roughly 10 billion all-charges-paid korunas per year. A significant positive characteristic of the final years of the Sixth Five-Year Plan has been a halting in the current unfavorable trend toward constant growth of the passive balance of the Czechoslovak foreign chemical trade, and a stabilization of its value at 8 billion all-charges-paid korunas.

Table 1. Position of the Chemical Industry in the Economy of the CSSR (in percentages)

	1965	1970	1975	1980
Chemical industry as percent of total industrial production	11.1	12.4	13.7	14.5
Chemical industry as percent of total exports	5.8	7.4	8.0	7.8
Chemical product imports as percent of total imports	10.6	13.7	14.8	12.5

Source: Computation by the authors.

Note: the chemical industry including the rubber and plastics industries and the paper and pulp industries, excluding crude-oil imports.

These facts necessitate a comprehensive comparison of the value of the resources committed to the development of this sector with final performance, particularly performance in the foreign-trade area. We regard such an analysis as an important basis for determining the projected position of the chemical industry within our national economic system. It is essential to evaluate the contribution of the chemical industry to foreign trade in close connection with the function of this sector in the production process of the Czechoslovak national economy. This is so because the chemical industry has been constructed in the postwar years as

a sector encompassing a comprehensive second sector, a domestic raw-materials base which lowers our dependence on the importation of classical natural resources while at the same time enabling related branches to implement innovative procedures.

Requirements for the domestic chemicalization of the national economy have been crucial for the conceptualization of the function of the chemical industry in the production process throughout recent five-year plans. The internal focus of this industry on our own national economic system and on the coverage of the raw materials needs of industry and intensive agriculture has stemmed primarily from the great needs of the Czechoslovak economy for the consumption of chemical products (due to a shortage of domestic raw materials for the processing industry), and likewise from the historic backwardness of a modern chemical industry in comparison with industrially mature countries, a backwardness which amounts to a minimum of 10 years in basic chemical products.

From a national economic viewpoint, the success of the chemical industry has been measured by the level and rapidity of its adaptations to the demands of related sectors. An objective evaluation from the viewpoint of the realization of these basic functions points clearly to successes which have been achieved, above all in relation to agriculture (fertilizer deliveries almost at a level of countries with intensive agriculture), but also in a sharp increase in the production and consumption of plastics, chemical fibers, synthetic rubbers and other chemical products for which the CSSR likewise occupies a significant place among the industrially mature countries.

The relatively high degree of chemicalization of the Czechoslovak national economy may be documented not only in terms of global indicators. For instance, the level of consumption of plastics in the production of the Skoda 100 and 120 passenger cars (more than 65 kilograms of plastic per car), has recently ranked the automobile industry first in this category in Europe.

The Decisive Criterion--Efficiency

This analysis leads to an important conclusion: An evaluation of the contribution of the chemical industry cannot be limited to data concerning direct imports and exports, but must also be studied from a national economic viewpoint, i.e., including the contribution of chemistry to an increase in exports or a reduction in imports of raw materials in related sectors. This analysis for the 1966 to 1980 period has shown that the so-called secondary exporting of the chemical industry (through its related sectors) at present equals the direct exports of chemical products. The most important finding however, is that during this 15-year period the Czechoslovak chemical industry, from a sectorial viewpoint, has been a passive element in the foreign trade balance in the amount of about 50 billion all-charges-paid korunas, while from the national economic viewpoint (including secondary contributions) it has been an active element in the amount of about 100 billion all-charges-paid korunas.

A comprehensive national economic approach to the evaluation of efficiency must be applied not only globally at a sectorial level, but also for individual products, in the whole technological chain from the original raw materials to the final products. Here we already cannot get by with a differential indicator and

the indicators derived from it, because they skew true profitability under conditions of unstable prices. From a national economic viewpoint, it is necessary to determine whether it is more efficient, given our conditions, to export chemical materials as such, or in the form of the final products of the related sectors (e.g., the consumer industry or engineering), as well as to determine the economic efficiency of substituting chemicals for traditional materials.

This approach definitely requires the broad introduction of the phasal cost-analysis technique and, in particular, techniques for determining comprehensive raw-material and energy intensiveness, in addition to a continuous foreign-currency calculation technique, not only in the chemical industry, where these techniques are especially important in regard to the many steps necessary for chemical production, but also in related branches and in sectors "competitive" with chemicals from a raw-materials standpoint.

Currently, all well-known projections of technical development agree in the conclusion that the developmental potential of chemistry has been far from exhausted. It is generally assumed that in the period to the year 2000 chemistry will maintain a high frequency of technological and product innovations which will rank the chemical industry among the sectors forming the creative core of the scientific and technical revolution.

Chemical products already constitute an irreplaceable material base for development, and not even the expected shortages of crude oil as a basic raw material are likely to result in any massive substitution of natural materials for chemicals. The solution to the projected absolute shortage of crude oil is not being sought in the replacement of chemical materials, but in new and more efficient techniques for the chemical processing of noncrude-oil raw materials.

Unambiguous Plus

The development of the chemical industry fully corresponds, as well, to the strategic line of our national economy, which is focused on a substantial reduction in the materials and energy intensiveness of the production process. The comprehensive energy intensiveness of a given unit volume of basic plastics, e.g., polyolefines, is 2.5 times lower than the energy intensiveness of an equivalent volume of steel in spite of the fact that the energy value of crude oil as the original raw material is included in the calculations of the energy intensiveness of plastics. An approximately equal relationship also exists for average energy intensiveness of nonferrous metals in comparison with plastic materials as substitutes (e.g., aluminum and polyamide). The replacement of 1 million tons of steel with plastics represents a saving of 500,000 tons of standard fuel, or about 1.25 million tons of brown coal when adjusted to approximate caloric values.

Likewise, world plastics prices, adjusted for equivalent volume units, are substantially lower than the prices of individual ferrous and nonferrous metals, in spite of the setback caused by the escalation in the prices of plastics which occurred in 1979.

The chemical industry is the most universal sector, when considered from the viewpoint of some of the needs it helps to satisfy. Expressed schematically, the

chemical industry contributes to the assurance of nutrition (fertilizers, pesticides, feed supplements), the health of the population (pharmaceuticals industry), but also to the clothing, shoeing, and housing of the population (i.e., nonworking needs), it produces important construction materials and preparations for other sectors of the national economy. This basic function of the chemical industry is at present being fulfilled at a qualitatively higher level, and supplementary chemical preparations are becoming essential innovational elements in related sectors (e.g., the use of chemical preparations in the component base of the electronics industry). All of the above considerations lead to the conclusion that a certain lead time in the development of the chemical industry is essential in comparison with the overall growth of production, and that a greater degree of integration of the Czechoslovak chemical industry into the international division of labor is essential.

The Solution--Specialization

In recent years, a number of measures have been prepared and implemented, under the leadership of both national ministries of industry, to reduce nonessential imports in the Czechoslovak chemical industry. In locations where production equipment permits, modernization and increased production capacity are being introduced and, after studying requests for imports, the possibilities for replacing the requested imported materials with domestic materials are considered. Particularly in recent years, a number of chemical enterprises have undertaken the creation of modern systems of quality control, which has led, in a number of cases, to a reduction in losses and rejects, or to an increase in the quality of production. These measures have, likewise, played a role in limiting imports of certain chemicals.

However, the size of our country makes it impossible to close off the domestic market. On the contrary, the objective need for production specialization leads logically to considerations concerning the purposeful and well thought out limitation of domestic production on the one hand, while at the same time calling forth the need to set up large production facilities oriented predominantly to exports. The trend toward increasing the frequency and extent of international transactions corresponds exactly with worldwide trends. There are even countries which export most of their chemical production (Switzerland exports 80 to 90 percent), even though they import almost 100 percent of the raw materials. It is, however, a question of what products they produce. Insofar as it is a matter of products with high use values, of products which are constantly being updated, then this trend is economically beneficial.

We cannot, then, limit our considerations concerning the future focus of the foreign-trade relations of the Czechoslovak chemical industry solely to a reduction in nonessential imports, even though this objective will maintain its importance. To a large extent, however, we must also consider active and aggressive exports in selected directions corresponding to our areas of specialization. Increased limitations on the development of the chemical industry in the Seventh Five-Year Plan will lead in a number of sectors to a need for increased imports. We come, therefore, to the conclusion that the monitoring of the final balance, taking into account both primary and secondary influences, should be the decisive criterion for determining the conceptualization and evaluation of the future orientation of the foreign-trade relations of the chemical industry.

It is, then, clear, that in the future we will not get by without establishing a specialized conception of the chemical industry. For example, the other socialist countries are pursuing opposite policies from us, and with a head start. Specifically, the GDR is famous for its special focus on the photochemical industry, Poland for cosmetics production, while Bulgaria and Hungary have developed a pharmaceuticals industry (in Hungary the production of medicines makes up more than half the chemical production of the country), and Romania is giving priority to the production of organic compounds. These are not, of course, fully exclusive specialties, because every development must be related to the current technological and productive base. It will be useful, therefore, to further elaborate and intensify current considerations concerning possible directions for Czechoslovak specialization in the chemical industry and, after weighing the possible alternatives and choosing the optimal ones, carrying out the necessary measures to assure the implementation of the proposed specialization. Regarding our rather uncomprehensive raw-materials base for chemical production, it will be clearly necessary to pursue primarily a strategy of selecting narrow fields which do not require much raw materials or energy, but which are dependent on qualified scientific, research, and engineering work. This trend constitutes the main content of the state target program "Selected Chemical Products."

If we speak of the conditions necessary for the assurance and realization of a particular area of specialization, then we are far from thinking only of capital investment. It will be necessary to carry out numerous alterations and changes so that the intention of carrying through a particular specialization can be successfully realized and mainly so that it can develop in a positive manner. It is a matter, for instance, of defining the necessary facilities for basic and applied research which would assure continuous innovation of specialized products, the construction of equipment for the necessary technical service, the assurance of a flow of patent, pricing, commercial, scientific and technical, and other information. The relevant colleges and divisions of the Academy of Sciences must also play their permanent and irreplaceable role in these areas.

These and other measures must be brought into line with a mutually interrelated system which will also have as a requisite unified and qualified management. The implementation of these measures is a demanding task, the more so as it requires changes in current proportions and plans. But if we wish to achieve a turnaround in the performance of foreign exchanges, then we must prepare and implement the necessary changes without delay.

9276
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CROP, WEATHER REPORT PUBLISHED FOR MARCH 1981

East Berlin FELDWIRTSCHAFT in German Vol 22 No 5, May 81, p 228

[Article by Dr D. Krumbiegel, GDR Meteorological Service, Central Weather Bureau, Potsdam]

[Text] The Weather Picture in March 1981

After first being too cool, on the 7th a period set in that kept being too warm, at times much too warm. Precipitation was heavy up to the middle of the third 10-day period. Duration of sunshine clearly stayed below normal.

First daytime average air temperatures lay circa 2 K below normal. Between the 7th and the 14th, the 20th and 26th, and at the end of the month, values were too high, mainly from 3 to 6 K, during some days between 7 and 10 K. For the rest of the time air temperatures were roughly normal. Altogether, the southern part of the GDR had more favorable temperatures than the northern. In the first 5-day period daytime temperature maxima mostly came up to around 2°C. The subsequent warm period brought maxima around 10 and partly 15°C. The maxima in the third 10-day period ranged between 10 and 15°C and regionally for a few days rose to 20°C. Up to the 6th there were ground frosts in the entire area every night. The minima came to -5 (locally to -10)°C. Then most nights remained, regionally or everywhere, entirely without frost. Light frosts still occurred relatively frequently (down to -5°C) between the 15th and 19th. In the first two 10-day periods the duration of sunshine was extremely brief, in the third it was roughly normal.

Precipitation in the first 5-day period was mostly snow, thereafter it was almost all rain. The rain was heaviest between the 7th and the 13th (on the 7th around 5 mm; on the 8th, in the north, around 5 mm; on the 9th, in the south, between 10 and 30 mm; on the 10th from 10 to 20 mm; on the 11th, in the north, 15 to 30, in the south, 10 to 20 mm; on the 12th, in the south, 5 to 15 mm; on the 13th, around 5 mm) and between the 23rd and the 26th (daily volumes up to 10, partly to 20 mm). Starting on the 27th, there was hardly any more rain. A snow cover still in evidence at the beginning of the month in large areas of the plains (depths up to 5 cm) was gone completely on the 6th. In the hills this happened around the 10th. Summits still had some snow at the end of the month.

Weather Data for March 1981 according to the Chief Climatological Office, Potsdam

1. Monthly Air Temperature Averages and Deviations from Normal Values

Schwerin	5.7°C	+2.4K	Erfurt	6.9°C	+3.9K
Neubrandenburg	5.1°C	+2.5K	Leipzig	7.5°C	+4.1K
Potsdam	6.5°C	+2.9K	Goerlitz	6.8°C	+4.1K

2. Average Precipitation according to Bezirks

Rostock	91 mm	= 268%	Halle	80 mm	= 258%
Schwerin	118 mm	= 303%	Erfurt	85 mm	= 218%
Neubrandenburg	106 mm	= 312%	Gera	59 mm	= 159%
Potsdam	127 mm	= 397%	Suhl	90 mm	= 191%
Frankfurt	99 mm	= 319%	Dresden	81 mm	= 172%
Cottbus	83 mm	= 237%	Leipzig	99 mm	= 268%
Magdeburg	97 mm	= 294%	Karl-Marx-Stadt	84 mm	= 162%

Soil, Crop and Labor

Up to the 6th the soil was still frozen widespread. Frost penetration mostly ranged between 10 and 25 cm, regionally between 30 and 40 cm. Abundant and relatively warm rains starting on the 7th not only did away with the frost unexpectedly fast but also warmed the soil unusually rapidly and in depth. The surface soil, starting at the end of the first 10-day period, reached daytime averages between 5 and 8°C up to midmonth. Then came a temporary reduction below the 5°C-threshold and then, in the last 10-day period, the ground warmed up to from 8 to 10°C. The subsoil, starting at the end of the first 10-day period, because of its high ground water content, warmed up more slowly but all the more permanently. By the end of the month, 7 to 9°C were recorded at a 50-cm depth, 6 to 8°C at a 100-cm depth. Ground water content up to the middle of the third 10-day period stayed around field capacity. By the end of the month the upper strata started getting dry. Above-normal rain volumes, by 60 to 80 mm in the northern part, by 30 to 60 mm in the southern, did not benefit either the soil condition or the nutrient budget. The result was general crowding in the surface soil, interference with the air budget, pools and extensive erosion damage. The relatively mild improvement of the soil structure through what the frost had done in the winter was canceled completely. Then also a considerable shift occurred of water-soluble nutrients to deeper soil strata. Other losses are likely to have occurred through surface-soil runoff. Though there were rather long periods with proper temperature conditions, the start of soil biological processes was greatly retarded by lack of air.

Daily average air temperatures of 5°C were exceeded for good in most of the plains on the 7th, in Rostock Bezirk and Neubrandenburg Bezirk on the 20th, in the mountains on the 21st. This threshold value that marks the general start of the vegetation period was thus prematurely crossed 20 days ahead of time widespread, between 10 and 15 days regionally. After the middle of the month, temperature averages once

more generally dropped below 5°C for a few days and caused temporary stagnation in vegetation. For the winter crop, which in many cases could not be sown within the optimum cultivation periods, the premature start of vegetation was of great advantage. It was possible to catch up with what had been in arrears. But it must not be forgotten that pools, nutrient shifts and interference with the air budget on the various acreages clearly made things come up unevenly. By the end of the month, nitrogen effects by means of coloration differences between well and not so well provided crops indicated the nutrient losses in the surface soil due to the rain. Phenological development, though vegetation received but few impulses from the temperature, showed prematurity up to the end of the month by from 10 to 15 days in the direction north to south. Trafficability of the acreages initially insured by the frost, could be used for fertilization measures. After that one could hardly drive on, or work, the soils at all. Relatively minor rains between the 19th and 22nd permitted the start of spring cultivation regionally, on light soils. Yet the still very moist deeper surface soil strata raised the danger of groove formation and structural damage. When there was no more rain at the end of the month, field work could be resumed, generally in the central and southern bezirks, locally in the northern ones. By the 31st, circa one-third of the summer grain was in the soil. Here and there they started cultivating early potatoes and sugar beets and vegetables.

Meteorological Projections for Farming in May 1981

Intensive mechanical operations for the root crop should improve the beds that have suffered from all so much rain in March.

Winter crop above all is likely to have adjusted to the abundant and easily accessible ground water. Because of this one must expect a heightened sensitivity to pre-summer dryness and a need for irrigation fairly soon. After the winter catch crop harvest, to be expected earlier than last year, one must preserve the ground water reserves of the soil for the second planting, in working the soil, as soon as the acreages have been cleared.

Nutrient losses in March caused by the rain would suggest late nitrogen fertilization for grain to be of increased importance.

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DEVELOPMENT OF TRANSPORTATION SYSTEM IN SIXTH FIVE-YEAR PLAN DESCRIBED

Budapest KOZLEKEDESI KOZLONY in Hungarian No 15, 12 Apr 81 pp 259-263

[Article by Dr Laszlo Toth: "Current Problems in Transportation Policy. Coordinated Development of the Transportation System in the Sixth Five-Year Plan Period"]

[Text] Transportation is an important element of the production infrastructure; as such, its development is of great significance in the formulation and specification of medium and long range economic policy objectives.

It is unnecessary to present long arguments for the well-known fact that transportation is a decisive factor affecting reproduction processes, living conditions and our participation in the domestic and international division of labor leading to a more modern production structure. As a result, its effects are much larger that its 5 to 7 percent share of some well-known indicators of economic development (e.g., gross or net national product, national income, number of employees).

Transportation development has a number of distinguishing characteristics as well as some similarities with productive and infrastructural sectors of the national economy. I will mention only a few. The sector is highly capital intensive. The value of public transportation vehicles, installations and networks represents 14 percent of the capital assets of the national economy (22 percent of production assets). Although there has been a decline of a few percentage points in the value and usability of those assets in the past 5 to 10 years, their replacement and development still require substantial resources.

One of the well-known aspects of transportation is the need for a system-oriented approach to ensure efficient development. The need is for coordinated development of the various transportation sectors combined with opportunities for domestic development and reconstruction projects coordinated with adjoining international systems.

Due to the large value of capital goods, relatively long lead times for reconstruction projects often carried out at a high cost with no suspension of normal operations and many decades of useful life, a single investment decision will define the operational mode, capacity and quality of a system for a long time to come.

These factors call for long range forecasting in the area of the development of transportation systems. This is why long range transportation development

objectives receive special attention in the course of formulating long range (15 to 20 year) plans for the national economy or policy guidelines for the sector itself.

At the same time, the pace if implementation of long range development objectives spanning several medium term plan periods must clearly be subordinated to the five year economic policy objectives of the national economy and defined in more precise terms in line with priorities, investment and modernization opportunities and financial, technical, labor and energy conditions. This does not represent criticism of the long range guidelines; it is instead a natural part of practical economics and planning. In view of the acceleration of world economic events of recent years it has become especially important to provide for rapid and flexible adaptation to certain unforeseen events even in the course of medium term planning. This led to more openness in the Sixth Five-Year Plan. For the sphere of development policy this meant chiefly the planning of higher reserves while the cabinet made concrete decisions only for the first year of the plan. For the full five year period, objectives and development opportunities were defined only in outline, to be defined in more precise terms within the framework of yearly plans to follow.

This principle of flexible development policies applies also to transportation. Due to the special features of network development, however, realization of medium term transportation objectives is substantially more clear-cut and secure than, for example, in the case of the processing industry.

With these facts in mind, it seems appropriate to compare the requirements and trends formulated in the work program and resolution on development of transportation policy guidelines discussed in 1978-79 by the National Assembly and subsequently by the Council of Ministers with the corresponding opportunities available in the Sixth Five-Year Plan period.

Principal Requirements of the Next 15 to 20 Year Period As Defined by the Transportation Policy Guidelines

Passenger and freight transportation demand must be satisfied with better organization and cooperation using available capacities, development of the division of labor in transportation and better coordination of production processes and transportation.

The development of mass transportation must receive high priority; it must also be improved through traffic organization measures. The growth rate of the privately owned passenger vehicle fleet must be determined on the basis of the carrying capacity of the national economy, the policy on living standards and foreign trade, financial and other factors. The principal task is to prevent the appearance of transportation logjams in the big cities. In the interests of smooth transportation within cities it is necessary to achieve true coordination of urban and transportation development and a better relationship between urban and suburban transit. The goal is to give priority to transportation development in the capital. Construction of the subway network is to continue at the current pace.

Efficient fulfillment of freight transportation objectives is predicated upon the coordination of freight transportation processes on the national economic level and

better utilization of reserves. The development resources necessary to achieve this must be set aside on the national economic level, within the framework of a program encompassing all aspects of up-to-date transportation methods.

It is necessary to raise the transport sector's share of investment resources in line with the abilities of the national economy and requirements while the resources spent on development are used to upgrade assets that are truly contributing to output. This means that the rate of transportation development must exceed the growth rate of the national economy. Available financial resources must be distributed so as to ensure coordinated development of the various branches of a unified transportation system.

Water, road and railway transportation junctions must be brought up to modern standards.

Modernization of the railway network, construction of roads and expressways and development of the airport and the water transportation system are necessary in part because of international transportation ties. The main international transportation lines and the capacity of border stations must be developed on the basis of coordination with the countries involved, in line with CEMA program objectives.

In areas where development in the past decade lagged behind required levels (reconstruction of railway tracks, safety equipment, junctions and switchyards, expansion of border stations, railway electrification, construction of roads and especially road crossings and peripheral roads in urban areas, construction and modernization of bridges) progress must be accelerated. This must be accomplished without creating serious bottlenecks in other transportation areas.

International road transport, air transportation and maritime shipping must be expanded in line with transport market opportunities and the economic benefits of foreign currency production.

A substantial portion of investment projects in transportation must be completed with no break in normal operations. Extra costs must be accepted to ensure that the capacity of most installations is sufficient to fill growing needs for a number of decades. Additional demands will emerge in connection with the conditions necessary to support continued development of private transportation, quality and safety requirements and increasingly important environmental considerations.

Practical applications of scientific and technical accomplishments must play a larger role in the development and operation of transportation.

Vehicle depots, repair and maintenance yards as well as service, parts and fuel supply networks must be developed along with the modernization of the vehicle fleet.

Development, maintenance and operation of transport lines require specialized construction capacities. These must be developed appropriately.

In the future we must continue to try to eliminate uneconomical transportation functions and replace them with more economical forms of transportation. Getting

and keeping manpower will become more difficult. This places extra weight on occupational safety, wages, social and health services and work conditions in general.

In job categories where manpower problems have become permanent, (e.g., railway coupler, brakeman, material handler, traffic and engine personnel) increased mechanization and technological development are necessary to alleviate manpower shortages. It is necessary to make sure that the labor force presently engaged in in-house transportation and material handling within plants, numbering in the tens of thousands, is reduced.

Principal Transportation-Related Objectives of the Sixth Five-Year National Economic Plan

The well-known principal objective of the economic policy governing the plan is to improve the equilibrium position of the national economy and especially the foreign trade balance along with the preservation of living standards and an improvement in living conditions.

This program will put a significant brake on the growth rate of transportation tasks in view of a modest increase in domestic utilization over a 5 year period combined with a 3 to 4 percent decline in the consumption-to-accumulation ratio.

The total value of investments in the socialist sector in the Sixth Five-Year Plan period will represent only 99 percent of the actual level of the preceding plan period at comparable prices. When we factor in central investment reserves not specifically assigned to any sector of the national economy, the decline in investment opportunities on the national economic level will be 6 to 7 percent.

In order to ensure that living conditions continue to improve under these conditions, investments in non-material sectors (e.g., health, education, cultural services) will increase. Thus, investments in the material sectors will be reduced by 9 percent compared to the preceding five year period.

The reductions are much more substantial in the area of construction and industrial investments, while the transition to a more effecient and up-to-date production structure and the maintenance of the earlier rate of development in the energy field present additional intensive demands.

The expected decline of investment opportunities will be about average in the area of transportation, telecommunications and water management, while investment in the agricultural and trade sectors will receive somewhat more favorable treatment. (Above average development rates for domestic trade will contribute to improved living standards.)

The investment resources available to transportation and telecommunications represent a significant sum in spite of a small decline discussed above: 130 billion to 134 billion forints at projected current prices. Since the leadership of the sector was unable to spend adequate amounts on the development of telecommunications relative to the existing backlog in the past 10 to 15 years (although the rate of spending

increased gradually), such spending must be increased to reduce the widespread backwardness of certain areas of telecommunications leading to further reductions in funds available for transportation. The proportion of telecommunications investment (on the order of 18 billion to 19 billion forints) will thus represent almost 2 percent of total investments in the national economy. This will permit high priority development of the mail service within telecommunications, since 12 percent more will be available for development in these areas at comparable prices than in the Fifth Five-Year Plan. Of course, this means that the potential for transportation development will be somewhat lower, though it will still exceed 110 billion forints. The order of magnitude of this sum is shown by comparing it with the only slightly larger combined development resources available to water management, domestic and foreign trade and the construction industry taken together, or to the entire agricultural sector. This represents a substantial development potential; thus, our goal must be to use this potential in the most efficient manner.

Transportation Development Directions in the Sixth Five-Year Plan With a View Toward Transportation Development Policy Objectives

The development objectives set by the transportation policy guidelines set forth in detail in 1978-79 defined major development directions up to the year 2000 in conjunction with statements regarding other areas. In accordance with the function of these guidelines, concrete objectives were not discussed in detail or set in a precise timeframe within the approximately 20 year interval. Thus, in evaluating the only practicable procedure is to examine the extent to which the development projects selected coincide with the directions set by the guidelines and facilitate their long-range implementation.

On the other hand, such a comparison will not be realistic unless we take into consideration the fact that the guidelines updated in 1978-79 were formulated essentially on the basis of the situation of foreign trade, the national economy and, in particular, transportation, as perceived in the mid-seventies and the long range development ideas current at that time. Based on the trends and limitations of the past 5 to 6 years and the next 5 years, the long range conceptual objectives are in need of reexamination in some areas; there is, however, no need to set fundamentally new development directions.

Although the formulation of enterprise-level medium range plans is still in progress and they are expected to cause minor adjustments relative to plan calculations on the national level, to our knowledge these will not lead to very large discrepancies. Therefore, we can safely evaluate the expected situation on the basis of national economic plan calculations as they are known today.

With regard to the requirements related to transportation tasks set forth in the guidelines, in our opinion they are in general agreement with the development policies in the transportation area formulated up to 1985.

Progress is slower than expected or justified in the area of introducing up-to-date freight transportation procedures within transportation and other, related areas of the national economy.

This is [illegible] available for development which applies to transportation [illegible] as much as to other productive sectors of the national economy.

I would merely point out [illegible] of the long range plan formulation [illegible] of updating the transportation guidelines, [illegible] to plan for a 30 to 35 percent [illegible] investment funds relative to [illegible] Plan in cooperation with the [illegible] economic factors. When we [illegible] contained another 25 to 30 percent [illegible] potential, then the need to [illegible] for the infrastructure and up-to-date [illegible] plan up to 1985 becomes [illegible] requirements.

This, [illegible] within the transportation [illegible] the growth rate of investment [illegible] will be lower by 2 percent [illegible] as a whole.

In spite of [illegible] investment funds, combined with [illegible] maintenance and modernization of roads and [illegible] Hungarian transportation system [illegible] while also allowing for [illegible] preserving the condition [illegible] capacities in some areas (e.g., [illegible] progress in eliminating the backwardness [illegible] as well as social facilities.

In accordance with [illegible] transportation policy guidelines and the [illegible] transportation tasks, the central area [illegible] and modernization of the vehicle [illegible] possible by the emergence of [illegible] of transportation during the last plan period, [illegible] large number of vehicles owned by public [illegible] transportation needs may be satisfied during the Sixth Five-Year Plan [illegible] additional vehicle purchases, provided that [illegible] in the area of organization and vehicle management.

I will now present development [illegible] of transportation briefly, in outline; after the formulation of enterprise and branch plans, it will be worthwhile to [illegible] discussion.

The [illegible] rail transportation within transportation [illegible], there will be a 15 percent increase [illegible] development and other enterprise-level investments [illegible] of resources (calculated at comparable prices).

As a result, track modernization will continue, although at a reduced rate (about 1300 to 1400 kilometers will be completed, mostly on trunk lines). 280 kilometers of track will be electrified and there will be a substantial increase in the number of lines and stations equipped with up-to-date safety equipment. It is important that modernization of stations and junctions may continue at the earlier rate. Development projects such as the Zahony transloading district, the Budapest/Kelenfeld railway station will be essentially complete while modernization of the country's most important junction, the Ferencvaros switching yard, will begin.

The total elimination of steam locomotives by the end of the plan period represents an important accomplishment in spite of a slowdown in vehicle development and replacement.

At comparable prices, the funds available for the development, modernization, maintenance and operation of the highway system will almost equal the sum spent in the preceding plan period. However, investment targets for development of the expressway system had to be reduced by about 15 percent and the sums available for substantial road and bridge modernization had to be cut by half in order to ensure the maintenance and continued adequacy of the national highway network and the technically very inadequate council road system under increasingly intensive use while achieving some improvement in downtown areas.

Within the highway vehicle fleet, the development of utility vehicles is expected to slow down relative to the preceding plan period. The bus fleet will essentially be limited to replacement of worn-out vehicles. Only a minimal amount of development or capacity expansion can be expected in public transport. As a result, the age of buses, the number of vehicles depreciated 100 percent and the mileage saturation will increase slightly. This will have an unfavorable effect on operational costs and fuel consumption. With improved maintenance and an extension of organizational measures, this will ensure that an approximately 15 percent increase in transportation demand over five years may be handled safely, at a level corresponding to the preceding period.

The truck fleet will increase by about 6 percent with purchases over the level needed for replacement. The increase, will, of course, be much larger in terms of freight capacity. The increase will be concentrated in the public sector.

As a result, average age in the public use sector will increase more rapidly, as will the stock of totally depreciated vehicles and milage saturation. This calls attention to the need to hold back this trend because in the next plan period it will be necessary to spend substantial resources on replacing a worn-out vehicle fleet.

The number of passenger cars continues to grow dynamically: of the more than 580,000 vehicles purchased, only 25 to 30 percent are replacements while the rest will contribute to the growth of the vehicle fleet, reaching 1.4 million by 1985. Of course, the use of passenger cars and the growth of transportation output will not keep pace with the growth of stock. It is necessary to make preparations for some shift in requirements back toward public transportation.

Transportation in the capital will continue to enjoy high priority within urban transit. At comparable prices, the funds available for the development of the subway network (the North-South line) will be almost the same as in the preceding plan cycle, even though the length of the newly opened line will be less than half of that. This is a result of differences in timing, structure and the technology being used. Unfortunately, the lack of additional resources will not permit a startup of construction on the new South Buda-Rakospalota subway line.

Expansion of the trolley and bus network, reconstruction of the Arpad bridge, main roads and junctions will contribute to an improvement in the capital's transportation system. In addition, about 10 percent more will be available at comparable prices to develop surface transportation, compared to the Fifth Five-Year Plan. The increase will be concentrated mainly in provincial transportation, represented by the implementation of the trolley program (about 45 kilometers will be added to the network) and development of the bus transit system.

Development of air transportation will also concentrate on traffic facilities. Development of the Ferihegy airport will continue at the same rate as in the preceding plan cycle. Stage 1 of this large scale investment project will be completed at the end of 1983 at the cost of almost 6.5 billion forints.

The main objective of the investment project is the completion of a new landing strip and related installations (taxi roads, control tower, flight safety and control facilities) as well as the hangar and technical base.

Completion of the new landing strip is a high priority task due to the rapid deterioration of the old one. Only a small amount of extra capacity will be created when the new landing strip becomes operational because the old one will have to be shut down at that time.

The hanger and technical base accommodating two airplanes makes it possible for MALEV to repair and maintain their planes under modern conditions. When it becomes operational, flight safety will improve and the repair time of airplanes will be reduced, leading to an increase in their utilization and a substantial improvement in working conditions for ground personnel.

With the completion of the expansion and remodeling of the present terminal building, its capacity will increase from an annual 1.5 million to 1.6 million passengers to between 2.2 million and 2.3 million. With the expected increase in traffic, this means that congestion will increase more slowly. There will nevertheless be unavoidable problems in passenger services.

Due to the lack of financial resources, the second stage of development, including the construction of a new terminal building, cannot begin in this plan period.

The real value of enterprise investments will double. This means, among others, an addition of six modern airplanes to the fleet.

In the area of water transportation, after the Fifth Five-Year Plan featured enormous investment spending financed from substanti loans, the lack of free

resources will result in a cutback of development to one fourth of the level of the preceding period. This will only permit the purchase of a few passenger boats river tugboats and barges, insufficient even to replace scrapped units.

Unfortunately, it will not be possible to develop port facilities despite their importance from the standpoint of growth in water transportation.

Pipeline transportation will receive substantially less (by about 40 percent) for development compared to the preceding plan cycle. There have been substantial investments to expand capacities in this area up to 1980; this is why it is possible to reduce the rate of development. There will nevertheless be a 900 kilometer or 10 percent increase in the total length of the pipeline network carrying oil, oil products and natural gas.

In sum, transportation-oriented development and modernization projected for the Sixth Five-Year Plan will move forward in the direction set by the transportation guidelines. This may be seen in coordination of the development of various transportation branches, a strengthening emphasis on tracks, more rapid development of backward areas within each branch (infrastructure, repair facilities, maintenance) and in attempts to replace human labor by machinery. At the same time, progress is not possible in a number of areas and sharp tensions are to be expected.

The lack of progress may be seen in the modest rate to development in the area of up-to-date transportation procedures. There will only be a very slight increase in the role of containerized single-unit shipments; there is not going to be any substantial modernization of the junction points of transportation branches (district railway stations, ports, etc.). Similarly slight improvement can be expected in the area of developing transportation-related facilities and technologies in other sectors of the national economy. We cannot complete investment projects aimed at expanding the capacity of transit connections in line with international network development guidelines, agreements and proposals. In spite of the resources allocated to the modernization of networks and junctions, only a slight improvement may be expected. For lack of resources, we cannot fully utilize foreign currency earning and saving opportunities inherent in international transportation.

New tensions may be expected in the course of the plan period, especially in the area of highway transportation. The problems due to the undercapacity of the Danube bridges will worsen. Over about 400 to 500 kilometers of the main highways, especially in the area of large cities, one must expect substantial traffic congestion in view of increased traffic. By the end of the plan period there will be a significant increase in the length of highways where strengthening of the road pavement cannot be postponed any longer. This means that the demand for pavement repair is expected to be about 50 percent higher in the Seventh Five-Year Plan period.

After the implementation of the vehicle reconstruction program begun in the Fourth Five-Year Plan period, the obsolescence of the road vehicle fleet has started once again and is going to accelerate toward 1985. The extent of this process will approach the critical threshold beyond which the burdens imposed on the Seventh Five-Year Plan become intolerable.

In view of these factors, the task relating to transportation development may be to initiate the allocation of supplementary resources (e.g., various types of decentralized funds and project credits for concrete development purposes) to reduce the most glaring tensions in line with the capacity of the national economy, in the course of yearly planning. An even more important obligation, however, is to ensure that the financial resources available for the development and modernization of transportation, known in outline at this time and fixed in annual plans, are used more efficiently than in the past.

9164
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DRAFT OF 1981 AGRICULTURAL PLAN PRESENTED

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[Article by Prof Dr habilitatus Bolesław Struzek, chairman, Sejm Commission for Agriculture and Food Industry]

[Text] The stagnant state of agricultural production in the past five-year plan period has exerted a significant influence on the present economic situation of the country. Whereas during the five-year plan period 1971-76 the mean annual value of the total agricultural production in fixed 1976-77 prices was about 607 billion zlotys, in 1976-80 five-year plan period it was running at the level of 621 billion zlotys, that is, it increased barely 2.4 percent.

If we were to assume that the mean annual growth rate of agricultural production should be 2.5 percent (in 1971-75 it was 3.3 percent), then the mean annual value of agricultural production would be 673 billion zlotys instead of 621 billion zlotys. Thus, the value of so-to-say "lost" agricultural production in the past five-year plan period is about 260 billion zlotys, in fixed prices.

The chief adverse consequence of this was expressed by a fall of the growth rate of consumption of foodstuffs and the increase of the adverse balance of foreign trade in agricultural food products. Whereas in 1971-75 the consumption of foodstuffs (fixed prices of 1 January 1977) increased by almost 28 percent, in 1976-80 it rose by about 16.5 percent. The achievement of the normal growth rate of agricultural production would reestablish the growth rate of the consumption of foodstuffs analogous to that in 1971-1976. At the same time, th adverse balance of foreign trade in agricultural food products in 1975-79 was about doubled (from 1,434,000,000 foreign-exchange zlotys to 3,061,000,000 foreign-exchange zlotys).

There is no doubt that the stagnancy of agricultural production was influenced by a series of atmospherically unfavorable years, especially 1980. In that year, total agricultural production, compared to the most favorable year in that five-year plan period, that is 1978, decreased more than 13 percent, including that of vegetable crops--by 22.5 percent. However, that was not the only cause, and perhaps it was also not the main cause.

In 1971-75, the increase in the value of the inputs and services from purchases amounted to 55.8 billion zlotys (fixed prices), whereas in 1976-80 it was one-half, and in unsocialized farming it was one-third of that va Especially low was the

increase of inputs that increase cropland productivity. Agricultural investments were mainly replaced by the input of direct labor, or were connected with the process of a socioeconomic reconstruction of agriculture. During the whole period, there prevailed an enormous inequality in the intersectorial allocation of investment outlays and inputs from purchase. In particular, the small peasant farms were cut off from access to investment means and means intended for current production inputs.

In 1976-1979, the mean annual value of inputs and services from purchases in socialized farming per hectare [ha] of cropland amounted to 17,100 zlotys, whereas in the nonsocialized farming it was only 6,200 zlotys, that is, about one-third that. In traditional individual [private] farms, forming a great majority of peasant farms, these inputs were probably in the amount of 2,000-3,000 zlotys per ha.

If we take into consideration deformations in our management of land (loss of almost 270,000 ha of cultivated land during the five-year plan period, irregularities in the sales of land of the PFZ [State Land Fund], breakdown of the reclamation works program, lowering of the level of agricultural techniques), decreased profitability of agricultural production, deteriorating market position of the agricultural producer and debasement of the social status of individual farmers, then we obtain a fuller picture of unfavorable social conditions for the development of agriculture. Against this background, it is understandable that there is an enormous increase of interest in problems of agriculture, liveliness of social discussions, inquiries into the causes of the crisis in agricultural production, and formulation of conclusions and proposals for the improvement of the state of agriculture. In this matter, the Sejm, including the Sejm Commission for Agriculture and Food Industry, is flooded by many letters, not only from farmers and persons directly connected with agriculture. There are many pertinent and valuable considerations in these letters. At the same time, however, they contain many controversial opinions, opinions not relevant to our reality.

Thus, for example, the authors of letters stressing the pathological state of the system of procurement prices of agricultural products, the system of prices for means of agricultural production and system of detailed prices for food are right. But are the postulates of raising procurement prices by 40 percent and reducing prices for means of production by 50 percent realistic? Practically, this would mean, assuming the planned procurement volumes of agricultural products for 1981 and the value of deliveries of investment materials and means of production, the increase of income in individual farming by about 230 billion zlotys, that is, by 87 percent, increase of budgetary subsidies for foodstuffs by about 160 billion zlotys and subsidies for the industry manufacturing means of production by about 50-60 billion zlotys. The economic consequences of such an operation speak for themselves, all the more so as the increases of wages and social benefits and increases in procurement prices, effected in 1980, will occasion in 1981 an enormous commodity gap in relation to the purchasing power of the population.

Frequently these letters negate the last adjustment of purchase prices of farm products (in November 1980), down to the assertion that this adjustment worsened the profitability of agricultural production. Yet this adjustment will bring about, in the scale of the entire year 1981, the net increase of money income (after substraction of the effects of the increase of prices for feeds) of about 36-37 billion zlotys. I do not wish in any way to assert that the last increase in prices ensures the proper profitability of agricultural production and creates a sound

system of procurement prices. Further corrections in the price system will be necessary, but we cannot deny the obvious facts and assert that the increase of procurement prices is disadvantageous for farmers.

The authors of such appraisals are like those who assert that the countryside benefits from too high incomes and for that reason "peasants do not wish to work," and therefore one should at last "stop the nonsense of individual farming," and transfer land to the state farms or introduce obligatory deliveries of agricultural products and establish the norms of production per ha of cropland. To be sure, there is also no lack of opposite demands, to liquidate a considerable part of socialized farms and transfer their land to individual farmers.

The list of these controversial opinions is considerable. The substance of the matter cannot be expressed by their enumeration. I would wish only to emphasize that agriculture in its present structural form is a plane in which there occur many divergent personal and group interests frequently aggravated by demagogic phraseology. And so in agricultural economics, much more than in any other sector of economy, there comes into play the necessity of a competent coordination of these interests with social interests in the broadest sense of this word. It seems that the formula of the unity of agricultural economy adopted in a joint resolution of the PZPR Political Bureau and Presidium of the Supreme Committee of the United Peasant Party [NK ZSL] should form a basis for coordination of these interests.

What Social Requirements Should Be Met by the Plan?

The causes of the crisis situation in agriculture and in the entire food management system will not be possible to eliminate in a year. It is self-evident. But also self-evident is that the assumptions of the plan cannot be limited only to a maintenance of the status quo. Assuming that implementation of the plan should effectually counteract a further worsening of the food situation of the country in 1981, it is also necessary to make the assumption that already within the scope of this year the necessary shifts will be carried out, shifts which will make it possible to accelerate the increase of agricultural production in subsequent years. Special preference should be given to those actions that take into consideration both aspects: immediate needs and long-range planning.

And what are the main conditions for stabilizing the food economy? We can mention the following:

--A rational system of procurement prices, of prices of the means of production and of retail prices of foodstuffs;

--adequate economic-financial systems of agricultural enterprises and systems of planning and development control;

--a significant increase of the inflow of investment materials, turnover means of production and services;

--radical reorientation of the industry for servicing the production needs of agriculture and of the whole food economy; the increase of the productive potential of the electric-machine industry and of agricultural chemistry;

--adequate level and pertinent directions of agricultural investments;

--efficient management of agricultural resources, generalization of processes of intensification of production and more rational allocation of funds.

On each of these points, the year 1981 must be strongly marked by real progress, otherwise the 3-year stabilization plan will be problematical.

The point is that the year 1981 should become a real turning point in the way of development of the food economy. And to solve this problem maximum concentration of the means of almost our entire economy is necessary.

In order to make this a reality, a radical change in the attitudes of agricultural producers themselves is needed. The published joint resolution of the PZPR Political Bureau and the Presidium of the NK ZSL, concerning key problems of the development of agriculture and agricultural policy and summing up the main social postulates of farmers, will become fully credible only when its formulations and principles are confirmed by their social practice.

Targets of 1981 Plan

According to the draft plan, the total agricultural production of 1981 should increase 7.9 percent. That means, however, that it will still not achieve its average level of 1978-1979. Different growth rates for vegetable and animal production were adopted. Whereas the growth of vegetable production was envisaged as high as 24.5 percent, in animal production a decline of 7.7 percent is being expected. This is, so to say, the reverse of agricultural production in 1980, in which vegetable production decreased 19.4 percent, whereas in animal production an insignificant drop was noted, compared to 1979. A decrease in the reserves of feeds as a result of the catastrophically low harvest of the main agricultural crops in 1980 will have its effect on the size of the livestock herd in 1981. In the draft plan, there was assumed a slight decrease in the number of cattle (by 2 percent) and a sharp decline in the number of hogs (by 17.6 percent). Results of the census taken of livestock in nonsocialized farming in January 1981 confirm the realibility of this assumption (a decline in number of cattle by 7.5 percent, of cows by 4 percent, of hogs by 14.3 percent, and sheep by 4.6 percent).

Results of the purchase of basic vegetable raw materials from the crops of 1980, and the envisaged decline in the procurement of cattle for slaughter in 1981 by 15.1 percent (560,000 tons) will have a bearing on the production outlook in the agricultural food-processing industry. The value of the production sold of the agricultural food-processing industry is envisaged to be 59 percent lower than in 1980. As a consequence, market supplies in 1981 will also be 3 percent lower, and the value of exports will decrease about 5 percent. On the other hand, there is envisaged the increase of imports by 20.5 percent, including from the countries of the II payments area by 24.5 percent. As a result of this, the deficit of the balance of payments in the turnover of agricultural processed-food products will increase by over 1.6 billion foreign-exchange zlotys, that is by 29 percent. At the same time, this indicates that the envisaged imports of agricultural foodstuffs articles in the amount of almost 9 billion foreign-exchange zlotys, will determine the degree of import intensiveness of agricultural production (feeds) and an sharp decline food self-sufficiency of the country. One may estimate that in 1981 about 25-30 percent of national consumption of food will consist of imported food or food produced with use of imported feeds. The degree of food self-sufficiency of

the country (taking into account exports) will decrease to 88-90 percent. This is one more reason for society and the national economy to ensure as soon as possible the necessary measures to change this situation.

In spite of the great import of agricultural products and foodstuffs, it will not make up for the loss of national production. In connection with this, the planned market deliveries, espeically of products of animal origin, will be lower than those in 1980. This concerns in particular deliveries of meat and processed articles (382,000 tons less), animal fats (27,000 tons less), sugar and confectionary.

The plans of the industries that manufacture the means of production for agriculture and for the entire food economy do not fill us with optimism either. The production of the electric-machine industry will be probably at last year's level. The production of tractors is envisaged to be more than 5 percent below their output in 1980 (3,000 fewer tractors). The production of nitrogenous and complex fertilizers will increase 5.8 percent in 1981 (78,000 tons), and that of phosphatic and complex fertilizers will increase 9.8 percent (85,000 tons). The production of phosphatic fertilizers planned for 1981, compared to that in 1979, will, however, be only 2.2 percent higher (21,000 tons).

Investments in Food Economy

It is extremely difficult to estimate the level of investment inputs for the food economy being planned for 1981. If we were to base our estimate on the level of investment inputs in the entire national economy, then such an estimate will be more favorable. Per 1,000 zlotys of investments in the entire national economy in 1979, the food economy was assigned 242 zlotys; correspondingly in 1980, 231 zlotys, and in 1981 it is being planned to assign 258 zlotys. This indicates an inconsiderable increase of the share of the food economy in the aggregate of investment inputs. A higher increase in the share of the food economy comes to light when one takes production investments in the area of the material production as a reference basis. In that case, the share of the food economy in 1979 equalled 33.0 percent, in 1980, 29.9 percent, and in 1981 it is planned to be 36.1 percent.

If, however, we take the growth rate of investment inputs in the food economy as a basis of comparison, then, compared to 1979, they are 15.2 percent lower and remain at the level of the past year. It is therefore only an apparent priority. Without denying the importance of housing requirements, we shall, however, point out that the investment inputs for the housing planned for 1981 amount to 158.7 billion zlotys, and are thus 15 percent higher than the inputs planned for the entire food economy aggregate.

We should add that the Sejm Commission for Agriculture and Food Industry, in abstaining from acceptance of the draft plan for agriculture, postualted the increase of investment inputs for the food economy from the planned 138 billion zlotys to 150 billion zlotys, pointing out in particular the need to increase investment inputs for the industry manufacturing tractors and agricultural machines, and for agricultural chemistry. For in this particular area, an especially drastic reduction of investment inputs compared to 1980 is being planned--41.6 percent (from 23 billion zlotys in 1979 to 13.7 billion zlotys in 1980 and 8.0 billion zlotys in 1981). After all, these are the industries that will determine both the technical

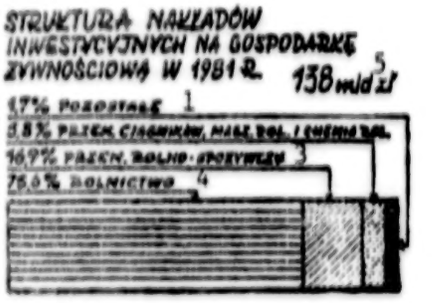
reconstruction of agriculture, and--in great part--the process of intensification of agricultural production and reduction of losses occurring in this area.

On the other hand, compared to 1980, an insignificant increase of investments is being planned in agriculture (1.4 percent) and a considerable increase of investments in the agricultural food-industry (in the whole sector by 18.2 percent) and in farming turnover (33 percent).

Structure of Investment Inputs for Food Economy in 1981

Key:

1. Others; 2. Tractor industry, agricultural machinery industry, and agricultural chemicals industry; 3. Agricultural food-processing industry; 5. billion zlotys



This structure neglects the insignificant size of investments for industries manufacturing means of production for agriculture. The share of these industries in the investment inputs for the food economy in 1979 amounted to 14.1 percent, in 1980 it has decreased to 9.9 percent, and in the 1981 plan it will amount to 5.8 percent.

On the other hand, we should favorably rate the changes in the structure of agricultural investments planned for 1981. The inputs for socialized agricultural enterprises, chiefly as a result of the checking of the new farm building construction, is reduced 12 percent, whereas investment inputs in individual peasant economy will increase 20 percent (7-8 billion zlotys).

Compared to 1980, it is planned to increase the investment input for land improvement 51.8 percent (2.8 billion zlotys); for supply of the countryside with water, 64.3 percent (0.9 billion zlotys) and for electrification, 33.3 percent.

The share of investments in the individual economy in the aggregate of investment inputs implemented directly in farms will increase from 43.6 percent in 1980 to 53.6 percent in 1981.

On the other hand, the share of investments which directly and indirectly benefit the individual economy (the corresponding part of investment inputs for land improvement, supply of the countryside with water, electrification, and investments for group mechanization) in the aggregate of investment inputs for agriculture amounted in 1980 to about 47 percent and in 1981 it will increase to about 58 percent.

These changes in investment structure will favorably affect the increase of their effect on the level of agricultural production, and, besides, their role will increase in balancing the purchasing power of the peasant agricultural population.

The value of the supply of tractors and machinery in 1981 will increase only slightly, whereas a considerable improvement is being planned in the supply of spare parts. Changes in the assortment of machinery will make it possible to increase their supply to individual economy.

A decrease in the production of combine harvesters, mower-cutters, press-pickups, single-seed drills, potato harvesters, potato planters, etc., is being planned in 1981.

On the other hand, there will be an increase in the production and supply of tractor-propelled mowers and horse mowers, sheafbinders, hay tedder-rakes, diggers, manure spreaders, grain drills, spreaders of lime and fertilizers, spraying machines and ridgers, basic implements (interchangeable plows, suspendable harrows, horse-driven harrows, suspendable disk harrows) and milking machines, fodder steamers, steamers, universal shredders, cutters.

All said, the number of machinery and basic agricultural implements supplied to individual agriculture will be increased by about 160,000 items. For sale to individual farmers, there will be assigned almost 80 percent in numbers of the aggregate supply of tractors. An increase in the supply of some varieties of building materials, especially of cement is also planned.

Much worse, in particular as regards their need, will be the case of supplying agriculture with means of production of industrial origin. In the first place, the envisaged deliveries of mineral fertilizers for 1981 crops show, in the agriculture as a whole, an increase of only 4 kg of NPK (nitrogen-phosphorus-potassium) per hectare of cropland. In individual agriculture an increase is being planned of 14 kg per hectare of cropland as against a reduction of 40-50 kg in socialized farming. This is one of the weakest points in the 1981 plan. On the other hand, the supply of agriculture with chemical means of plant protection will improve considerably.

Deliveries of concentrate feeds from state resources will be increased 5.3 percent (about 400,000 tons), including deliveries of high-protein concentrates by 14.3 percent (100,000 tons).

In 1981, if it is possible to increase the size of investments, especially through the implementation of so-called unlimited investments, if investments in individual agriculture are even greater, and if the program for an additional increase in the production of industrial means required by agriculture were realized, all this still does not underrate the importance of improvement in the effectiveness of management in farming itself, both socialized and individual. A real test of the value of the process of sociopolitical renovation will be in the progress achieved in this field.

The joint resolution of the PZPR Political Bureau and Presidium of the NK ZSL provides political conditions for elimination of any deformations in the system of agricultural policy. The process of renovation encompasses all levels of rural self-government: territorial self-government (people's councils), and agricultural and cooperative self-governments. This will be a new, great social force--a new economic subject in the formulation and implementation of agricultural policy. The respective elements of the economic reform will gradually be introduced. This will be followed by the necessary amendments of agricultural legislation. That should form a new set of conditions in which the same reserves of production factors can become more effective

The results of agricultural production and the conditions of the development of agriculture are greatly influenced by the correct macroeconomical decisions which are being taken at the central and voivodship levels. Not lesser is also the effect of decisions and actions taken on the scale of gminas [rural parishes] and even of single villages. This assigns a particularly important role to all forms of rural self-government and especially to a reborn agricultural self-government.

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